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ABSTRACT

IDENTIFIERS

In 1992 and 1995, Iowa received statewide Star Schools grants to demonstrate the use of fiber-optic technology to provide live, two-way, full-motion interactive instruction which allows greater levels of interactivity than previous forms of distance instruction. The grant allowed the state to equip over 100 fully interactive video classrooms in community colleges, universities, and K-12 schools. This report summarizes evaluation data for the Iowa Project from October, 1995 through April, 1996. Data were collected from each of the project components (Project Management, the Communications and Resources Clearinghouse, Regional Partnerships, and the Teacher Education Alliance) through written surveys, telephone interviews, record data, and collection of documents and artifacts. In section 1 of the report, the project activity is summarized in terms of its goals, which focus on: instructional materials, infrastructure development, training and technical support, information systems, and preservice teacher education. Section 2 presents evaluation data by the national goals for statewide projects, including infrastructure development, underserved learners, instruction, professional development. Conclusions are provided in section 3 and section 4 contains appendices. Tables, figures, and related documents make up this section, including: multimedia projects, exemplary applications, regional partnerships, Iowa Communication Network (ICN) and Internet connections, training and technical support, information systems, preservice teacher education, and National Evaluation Goals and Indicators. (AEF)



# **Evaluation Report**

Fall 1995-Spring 1996

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June 1996

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# IOWA DISTANCE EDUCATION ALLIANCE PRELIMINARY EVALUATION REPORT

# October, 1995 - May, 1996

### by Chris Sorensen, Nancy Maushak, and Marcia Lozada

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# IOWA DISTANCE EDUCATION ALLIANCE PRELIMINARY EVALUATION REPORT

October, 1995 - May, 1996

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# Introduction and Background

In 1992, the state of Iowa received a special statewide Star Schools grant to demonstrate the use of fiber-optic technology to provide live, two-way, full-motion interactive instruction which allows greater levels of interactivity than previous forms of distance instruction. The grant allowed the state to equip over 100 fully interactive video classrooms in community colleges, universities, and K-12 schools. By October, 1993, 103 two-way interactive video classrooms were connected to the Iowa Communications Network (ICN) and fully operational. In October, 1995, Iowa was awarded an additional \$4 million for further development of this statewide system. A partnership of Iowa educational institutions including the Iowa Department of Education, Iowa Public Television (IPTV), the state's three regent institutions, Iowa's 15 community colleges, the 15 Area Education Agencies (AEAs), and Local Education Agencies (LEAs) have worked together during both grants.

The Iowa project consists of four components, each responsible for completing specified activities. These four components are (1) Project Management, (2) the Communications and Resources Clearinghouse, (3) Regional Partnerships, and (4) the Teacher Education Alliance (TEA). For the 1995 project, the Iowa partners defined five goal areas that were slightly different from the goals of the 1992 project. The five goal areas in 1995 were: (1) developing instructional materials to be used in distance education, (2) supporting infrastructure developments, (3) providing training and technical support for distance education, (4) expanding access to and information about distance education, and (5) supporting incorporation of distance education in colleges and universities involved in training future teachers.



Assisted by the Research Institute for Studies in Education (RISE), evaluation indicators for the project were selected by the partners. Representatives serving on a Partner's Council for the Iowa Star Schools project were asked to assist with identifying the most important evaluation questions to ask in assessing the project's impact on distance education in the state. The state evaluation indicators were developed using an evaluation approach that looks at accountability, effectiveness, impact, organizational context, and unanticipated outcomes, the AEIOU method. This approach was developed and refined by Drs. Jimmy Fortune, Jan Sweeney, and Chris Sorensen, and has been used for several years by the RISE at Iowa State University.

With this approach as a reference, members of the Partner's Council were asked to identify indicators that could determine whether the project had accomplished its goals (accountability), how well the activities were done (effectiveness), and what difference it made for Iowa education (impact). Members of the Partner's Council as well as regional coordinators were also asked to identify organizational or environmental factors that either helped or hindered the project and to note unanticipated activities, events, and outcomes that occurred during the project.

The Iowa, Kentucky, and Mississippi Star Schools projects are referred to as the "special statewide projects". These projects are unique in the Star Schools program, a program that has traditionally focused on satellite delivery of instruction. The special statewide projects involve developing statewide infrastructures for distance education that allow for two-way interaction in real time between students and instructors. A set of indicators was developed through the Star Schools program to evaluate the satellite-based projects nationwide, but because the three statewide projects were different from the satellite-based projects, it was felt that different indicators would be needed.

In early 1996, evaluators and project directors from the three statewide projects agreed upon a set of goals and indicators to be used to measure the success of the statewide systems in meeting educational needs of each state. These goals and indicators, referred to as national indicators, were approved by the federal Star Schools project in March, 1996, and will be used to assess the current three statewide projects as well as future statewide projects funded through Star Schools. The national goals for the statewide projects are to: (1) increase access to educational programs by establishing a technological infrastructure for distance learning, (2) reach underserved learners, (3) expand instruction in core subject areas as well as literacy skills and vocational education, (4) provide professional development that is sustained over a period of time, (5) employ a variety of electronic technologies and tools for distance education, (6) foster partnerships, and (7) demonstrate improved cost benefit ratios.

This report will summarize evaluation data for the Iowa Project from October, 1995 through April, 1996. Data were collected from each of the project components (Project Management, Clearinghouse, Regional Partnerships, and TEA) through a variety of methods including written surveys, telephone interviews, record data, and collection of documents and artifacts. In Section I of this report, the data will be summarized by Iowa's 1995 project goals. As most activities of the 1995 project have recently been initiated, little impact data is available at this time. Several impact measures are scheduled to be collected during Fall, 1996. Section II of this report will summarize the available data by the national evaluation goals for statewide projects. Section III will provide some conclusions related to the project. Section IV contains the appendices. Tables, figures, and documents related to the evaluation are included in this section.



# SECTION I:

EVALUATION DATA BY
IOWA DISTANCE EDUCATION
ALLIANCE PROJECT GOALS



# Instructional Materials

Goal 1: Instructional materials for improvement of instruction in mathematics, science, foreign language, and other subjects such as literacy skills and vocational education utilizing distance education learning technologies will be developed and made available to educators and students of Iowa.

Objectives related to this goal include (1) development of multimedia instructional products for K-12 ICN-related use, (2) development of strategies to keep development of instructional materials continuing past the funding cycle, (3) identification and dissemination of exemplary educational technology applications, and (4) development of a traveling educational technology demonstration unit.

#### **Multimedia Products**

The project was successful in funding six proposals to develop multimedia instructional materials to be used over the ICN. The proposal process was effective in encouraging applications from a variety of educational levels that reflected a variety of content areas.

Materials, tables, and graphs related to the multimedia projects can be found in Appendix A.

# <u>Accountability</u>

- Requests for Proposals (RFPs) were distributed across the state to solicit
  applications for the development of multimedia products. RFPs were sent to
  superintendents in all Iowa school districts, community college presidents,
  AEA administrators, and executives at all three regent institutions.
  Presentations were also made to groups of educators and information about
  the RFPs was placed on the IOWA Database and on the Iowa Department of
  Education web site.
- 39 proposals were submitted and six were selected for funding.

#### **Effectiveness**

• A review process involving multiple groups of participants from a variety of educational organizations and ensuring geographical representation was used to rate the proposals. Fourteen reviewers were from local schools, three from regent universities, two from community colleges, and one each from an AEA, a private college, and a health center. Proposals were reviewed both individually and by a team of three reviewers. Reviewers did not review any proposals from their own organization.



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- The project was successful in soliciting proposals from a broad range of educational organizations. Applications received included four from regent universities, four from community colleges, 10 from Area Education Agencies (AEAs), and 21 from local school districts. There were six private colleges participating as project partners.
- The applicants awarded funds included two community colleges, two AEAs, one regent university, and one local school district. 71 Iowa schools were included as partners in these projects. Other partners in the funded projects include a second regent university, other AEAs and community colleges, several private companies, the Workforce Development Center, the North Central Regional Educational Laboratory (NCREL), and the Vermont Exemplary Program.
- Funded projects involved development of (1) curricula for high school equivalency education and career planning to be offered over the Iowa Communication Network (ICN) and World Wide Web (WWW), (2) interactive mathematics products for middle school students, (3) a foundations course for a Career Academy to be offered over the ICN, (4) interactive chemistry units for use in high schools, (5) instructional units in environmental science, and (6) ten teacher developed instructional units adapted from existing elementary, middle school, and high school curricula in a variety of content areas.

#### <u>Impact</u>

- As curricula and units are completed, products will be evaluated by a panel of experts including teachers using the products.
- Requests for the materials and their use in schools will be measures of impact.

# **Exemplary Applications**

The project was successful in identifying exemplary applications of technology in K-12 education. The project was effective in identifying exemplary applications that could be used at every educational level, in a variety of content areas, and that used a variety of media. The project also disseminated information to classroom teachers and other educators about the exemplary applications of technology.

Materials, tables, and graphs related to the exemplary applications can be found in Appendix B.

# Accountability

• Surveys were distributed to all K-12 schools in the state asking for examples of exemplary uses of technology in education.



- Examples described in returned surveys were judged by a group of teachers, media specialists, representatives from community colleges, and representatives from the Iowa Department of Education.
- 278 examples of technology use were identified and 19 were selected as exemplary applications. These 19 projects were provided with additional funding to continue activities.
- Information about the exemplary applications was placed on the IOWA Database and a booklet is being developed for distribution.

#### **Effectiveness**

- Among the technology application submissions were 74 for elementary schools, 78 for middle schools, 107 for high schools, and 19 for community colleges. Among the 19 applications identified as exemplary, there were six for elementary school, eight for middle school, seven for high school, and four for community college.
- Subject areas covered in the funded exemplary applications included language arts (8), science (4), social studies (5), math or computer science (3), vocational education (1), art (2), and foreign language (1).
- Applicants used a variety of media. Computer software was the media most used among the applications. Many projects used a combination of media. Among those funded, nine involved use of Internet, eight multimedia, and seven computer software.

#### <u>Impact</u>

- Four showcases were held to allow those identified as having exemplary projects to share their ideas with fellow teachers. Three of the showcases were held over the ICN and included a total of 58 sites. One showcase was held on-site. Total attendance at the showcases was approximately 270.
- Follow-up surveys of teachers will determine whether the ideas presented are being used.

#### **Demonstration Unit**

Discussions were begun to determine the technologies to be included in the traveling demonstration unit and how the unit would be utilized.

# Strategies for Continued Funding

Additional funding sources are being investigated.



# Infrastructure Development

Goal 2: Iowa educators and students will be supported in distance learning technologies by training and access to ICN video and data resources.

Objectives related to this goal include (1) providing selected sites with equipment including ICN basic video classroom components or enhancements and/or routers and equipment for accessing Internet via the ICN and providing block grants to schools to enhance their technology plans, (2) providing staff development opportunities for K-12 educators in the use of educational technology, and (3) providing resources to partially offset school district costs for access to Internet.

Plans were submitted by each of the 15 regions in the state outlining how they would spend regional allocations in each of these three areas. Regions opted to focus their resources in different ways, for example, some spending their allocations primarily on Internet support and others on staff development. Activities in the regions occurred in five areas: (1) purchase of video classroom equipment for schools connecting to the ICN, (2) funding to offset purchase of equipment for schools to connect to Internet or costs associated with dial-up Internet connections, (3) regional staff development activities, (4) technical support and assistance provided to schools, and (5) curriculum development.

Summaries of regional plans and accomplishments, a survey of regional coordinators, and regional training evaluations can be found in Appendix C.

#### ICN and Internet Connections

Additional sites have been connected to the ICN and a number of schools have been connected to Internet as a result of the project and demand continues to grow.

Tables, charts, and graphs related to ICN and Internet connections and use can be found in Appendix D.

# **Accountability**

- An additional 151 ICN sites have become operational since the completion of the last Star Schools project. 68 of these sites have become operational since January, 1996 with 28 of those located in K-12 school buildings. Another 56 sites are scheduled for connection in Fall, 1996 and approximately 120 will be connected the following year.
- Among 382 school districts, 72 have been connected to Internet since the project began. An additional 85 are scheduled to be connected next year.



#### **Effectiveness**

- Total hours of use of the ICN by semester has increased from 16,000 hours in Fall, 1993 to 56,000 hours in Spring, 1996.
- K-12 use of the ICN accounts for approximately one-fourth of the total use of the system.
- 67 courses were offered over the ICN in Fall, 1993 compared to 166 in Fall, 1995.
- Course offerings have been in a variety of content areas.
- Regional coordinators suggested several ways to improve the effectiveness of the project, including improved communication to schools, assuring equity in funding for local schools, being aware of time constraints, providing schools with more examples of innovative uses of the system, and addressing issues related to the control of the system.
- In general, project coordinators report satisfaction with the distribution of regional funds and with the effectiveness of project management, although several coordinators were unfamiliar with the project management.

#### **Impact**

- There has been an increase in the use of the ICN for offering K-12 courses.
   Seven K-12 courses were offered in Spring, 1994; 16 in Fall, 1994; 19 in Spring, 1995; 32 in Fall, 1995; and 36 in Spring, 1996.
- There has been increased use of the ICN to deliver staff development to K-12 teachers. Seven staff development opportunities were reported in Fall, 1995 and 11 in Spring, 1996.
- Regional coordinators report an increased demand among school districts for ICN and Internet connections. They indicate that the Star Schools project has motivated schools to adopt and use a variety of technologies much sooner than they would have otherwise. Coordinators also report that the project has provided increased access to learning opportunities for K-12 students and staff.
- Teachers and administrators in local schools will be surveyed in Fall, 1996 to determine the impact of the infrastructure development on the local schools.



# Regional Staff Development

Teachers have been supported through local staff development opportunities on the use of educational technology.

#### Accountability

 Nine regions provided local opportunities for staff development in the use of technology, including training on use of the ICN and Internet, training for networking support specialists, help desk training, training on HTML, troubleshooting training, and training of technology leaders.

#### Effectiveness

• Participants were asked to complete surveys. Responses indicated that the staff development opportunities were worthwhile.

#### <u>Impact</u>

• Teachers and administrators in local schools will be surveyed in Fall 1996 to determine the impact of the staff development opportunities.

# Support to Local Schools

Schools have received additional funding to support technology initiatives. Regional coordinators indicate that regional efforts have been received positively.

# **Accountability**

• 12 regions have distributed additional funds to local schools to help support Internet connections. Funds were provided for routers, switching devices, servers, direct connection costs, and dial-up costs.

#### Effectiveness

 Regional coordinators report local satisfaction with the distribution of funds and indicated that these funds have been a catalyst for increasing demands from schools for Internet connections and assistance with technology planning.

#### <u>Impact</u>

 Regional coordinators report that schools are now focused on putting LANs and WANs in place in the district to increase Internet use.



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# Training and Technical Support

Goal 3: Local and regional educational personnel will receive technical training and planning assistance to ensure that students and educators can easily access distance learning technologies in an efficient manner.

Objectives related to this goal include providing (1) Help Desk training, (2) training for "troubleshooting" ICN video classroom equipment, (3) training for "troubleshooting" local area networks (LANs) and wide area networks (WANs), (4) assistance with planning and preparation for local distance learning, and (5) training to develop computer-based skills for educators.

Summaries of training evaluations and copies of surveys can be found in Appendix E.

# Help Desk Training

The project was successful in offering a Help Desk training session. Participants rated the Help Desk training as very effective.

#### <u>Accountability</u>

• A Help Desk training session was offered to 15 sites over the ICN. There were approximately 25 attendees; half were media directors and the other half were AEA technology specialists, secretaries, and switch board operators.

#### **Effectiveness**

 Participants rated the content, the organization of the session, the presenter, and the delivery system positively. Suggestions for future training sessions included expanding the content, providing more specific information prior to the session, and allowing time for participants and the instructor to become more familiar with the nuances of the equipment at the individual sites.

## **Impact**

• Follow up surveys should determine whether participants have changed behaviors as a result of the training.



# Room Manager (ICN Troubleshooting) Training

The project was successful in offering training to troubleshoot problems in the ICN classrooms. Participants rated the training sessions positively.

#### **Accountability**

• Three five-hour room manager training sessions have been held. Among the 48 participants were site monitors, media specialists, and administrators.

#### Effectiveness

 Participants liked the overall quality of the workshops, the quality and organization of the handouts, and being able to see and work with the equipment. Suggestions for improvement include providing more opportunities for hands-on activities, breaking the session into shorter segments, and discussing non-technical site monitor problems.

#### **Impact**

• Follow up surveys should determine whether participants have changed behaviors as a result of the training.

# LAN/WAN Training

The project was successful in offering training for developing local area networks (LANs) and wide area networks (WANs). Participants rated the training as effective.

# **Accountability**

• 30 participants attended a training session on local and wide area networks. Participants included telecommunications and media specialists, consultants, engineers, and teachers.

#### **Effectiveness**

• A majority (over 50%) of the participants felt that the length of the training was about right (52%), the session was easy to follow (78%), participant's understanding was improved (85%), the trainer was effective (89%), enough time was allowed for questions (81%), and effective materials were provided (74%). About 25% of the participants thought the session was too short and 25% felt they left the session unsure as a trainer.



#### **Impact**

 Follow up surveys should determine whether participants have been able to successfully install LANS and WANs a result of the training.

## Planning and Preparation

Regional coordinators have been assisting local schools in planning and preparing for connection to the ICN and/or Internet and report that increasing numbers of schools are requesting assistance with planning. The project has been effective in encouraging schools to invest in new technologies.

#### **Accountability**

• Six regions are using project funding to assist schools with technology planning or technical support. Two AEAs have hired specialists or consultants to assist schools with installing, configuring, and maintaining equipment. One has established a help desk while another has purchased software to provide technical assistance. One AEA conducted a LAN analysis for each school district in the region, while another provides meetings between the AEA media advisor and area schools to discuss technology needs.

#### **Effectiveness**

- Regional coordinators reported that an increasing number of schools are requesting assistance with technology planning and that the Star Schools project has provided the impetus for many schools to move forward with plans to connect their classrooms and buildings through LANs and WANs.
- Surveys of the schools in the fall may help determine their perceptions of whether or not adequate planning and preparation assistance is being provided.

## <u>Impact</u>

 The number of schools acquiring technologies as a result of planning activities will be an indicator of impact. The perception of Regional Coordinators is that this number is increasing.

# **Computer Training**

Computer training workshops (i.e. learning how to use PowerPoint) are occurring across the state.



# Information Systems

Goal 4: Iowa educators and students will have access to information concerning distance education opportunities and will be provided with actual experiences utilizing distance education technologies in targeted curricular areas.

Objectives related to this goal include (1) expanding information available in the IOWA Database, (2) providing instructional activities over the ICN, (3) developing scheduling software for ICN video sites, (4) acquiring teleconferencing translation equipment that can be used to connect to other networks, (5) producing and distributing information about the ICN to educators and students, and (6) conducting an educational web masters meeting.

Materials, tables, and charts related to information systems can be found in Appendix F.

#### **IOWA** Database

Information available via the IOWA Database has been expanded and use of the database has increased.

#### **Accountability**

 A number of new sections have been added to the IOWA Database, including a PBS series, information on exemplary technology applications, a searchable list of ICN classes, and a clickable map of ICN sites.

#### Effectiveness

• Use of the IOWA Database has increased since Fall, 1995. The average number of files transmitted per day in September, 1995 was 200 while in April, 1996 it was approximately 600. The monthly number of files transmitted has risen from just over 5,000 per month to approximately 20,000 per month.

#### **Impact**

- Users of the IOWA Database represent a wide range of interests both nationally and internationally. Monthly file transfers by U.S. commercial interests have increased from about 1,000 files per month to about 4,000 files per month. File transfers by U.S. educational interests have increased from 1,000 to 3,500. File transfers by clients in foreign countries have gone from none in September, 1995 to approximately 500 per month in April, 1996.
- A follow-up survey of users will ask how they are using the information obtained from the IOWA Database.



#### **Instructional Activities**

The project has sponsored a number of instructional activities offered via the ICN with hundreds of students participating.

#### **Accountability**

- The project has sponsored several instructional activities including one on pet care, three on music, and a collaborative project among three schools on fossils. Additional events are planned.
- 561 K-12 students participated in instructional activities sponsored by the project.

#### **Effectiveness**

• Surveys were provided to participating students. Data analysis will be conducted as surveys are returned.

#### <u>Impact</u>

• Fall surveys of students will look at their perceptions of these activities.

## **Scheduling Software**

New scheduling software has been purchased and is being pilot tested.

# **Accountability**

 CISCO scheduling software has been purchased and is being pilot tested by IPTV schedulers, National Guard schedulers, and schedulers in regions 10 and 15 during the summer. The software should be operational by September 1, 1996 and will be used for scheduling of Spring, 1997 activities on the ICN.

#### **Effectiveness**

Schedulers will be asked about the effectiveness of the system.

#### <u>Impact</u>

• Fewer delays in scheduling and fewer conflicts in scheduling should be indicators of the impact of the new software.



# **Teleconferencing Translation Equipment**

T-1 and Desktop Video conferencing equipment will be ordered at the end of June. This equipment will allow connection of the ICN to other networks and allow delivery of multimedia products from remote servers.

#### Information Distribution

Brochures, pamphlets, and videos developed as part of the previous Star Schools project continued to be distributed on request. A new flyer about the IOWA database was distributed statewide and a new video, "Your Internet Connection", and flyer describing the video were also distributed.

# Web Masters Meeting

A Web Masters meeting is being scheduled for Fall, 1996.



# Preservice Teacher Education

Goal 5: Support will be provided for distance education training needs of preservice programs in colleges and departments of teacher education in Iowa's public and independent universities and colleges.

Objectives related to this goal include (1) coordinating technology training among the Iowa teacher preparation colleges, (2) holding two ICN seminars for faculty of teacher education programs, (3) developing an updated monograph of effective strategies for distance education use in teacher education, (4) producing a newsletter dealing with preservice teacher education, and (5) funding 15 action research studies dealing with the implementation and practice of distance education in Iowa.

Materials, tables, and charts related to preservice teacher education activities can be found in Appendix G.

# **Technology Training and ICN Seminars**

Teacher education faculty attended a workshop on distance education. Reaction to the workshop was positive. Faculty, administrators, and students participated in site visits at a number of private college campuses.

#### <u>Accountability</u>

- A workshop for teacher education faculty was held in conjunction with the Iowa Distance Learning Association (IDLA) conference. 23 teacher educators attended representing all three regent institutions and 19 of the 28 private colleges in the state.
- Site visits have been conducted at 15 private colleges to discuss incorporation of distance education into the teacher education curriculum. Six of the site visits to private colleges included use of the ICN.
- 12 faculty members received assistance in registering for ICN training workshops.

#### **Effectiveness**

 Participants rated the IDLA workshop good to very good in both quality and usefulness. They indicated that the topics were meaningful and that they liked the opportunities for collaboration and sharing. Suggestions for improvement included more time for the sessions, including collaboration with K-12 schools, and providing examples of ICN use.



- Participants in site visits included 62 education department faculty, 26 faculty from other departments, eight media or technology staff, 15 administrators and 40 students.
- Topics covered in the site visits include information about (1) the ICN and the Iowa Distance Education Alliance, (2) the showcase award winners, (3) examples of uses of technology in teacher education, (4) what other colleges are doing in distance education, (5) teaching practices in a distance environment, and (5) additional resources available.

#### **Impact**

 Follow-up surveys with teacher education faculty will determine how distance education technology has been integrated into teacher education programs. Comparisons can be made with information collected in 1994.

# Monograph and Newsletter

The monograph on effective distance education techniques in teacher preparation is currently being revised.

Two issues of TEA Times have been distributed to approximately 1,300 educators across the state. The newsletter is sent to K-12 teachers, teacher education faculty, regional coordinators, and others.

#### **Action Research**

Ten research proposals were funded to study distance education in Iowa.

# **Accountability**

• An RFP was distributed asking for research proposals dealing with distance education in Iowa. Ten proposals were received and ten proposals were funded. Articles will be written for inclusion in an encyclopedia of research as projects are completed.

#### **Effectiveness**

• Surveys will be included in the completed encyclopedia. Surveys from the current encyclopedia indicate that the resource is useful.

# **Impact**

• Number of encyclopedia requests may be used as an indicator of success.



# SECTION III:

EVALUATION DATA BY NATIONAL GOALS FOR STATEWIDE PROJECTS



# Infrastructure Development

Objective 1: Increase access to educational programs by establishing a technological infrastructure for distance learning.

Outcomes listed under this objective include (1) providing learners with access to interactive video systems, (2) providing learners access to Internet/on-line services, and (3) integrating existing systems into the infrastructure.

A copy of the national evaluation indicators is included in Appendix H. The list of school districts with ICN connections is included in Appendix D.

#### **Interactive Video Connections**

Additional sites have been connected to the ICN and demand continues to grow.

• Currently 128 school districts have access to an ICN classroom; 90 schools have a classroom in their building. In addition to the 90 classrooms located in K-12 buildings, there are 52 classrooms at community colleges, 12 at regent universities, 12 at AEAs, 18 at state or federal agencies, 9 at private colleges, and 10 at other locations. The National Guard also maintains 40 ICN classrooms that are available for educational use.

#### **Internet Connections**

Among 382 K-12 school districts, 72 have been connected to Internet since the
project began. An additional 85 are scheduled to be connected next year. Most
of the schools are using direct connections to the Internet through the ICN
with the AEA serving as the hub. Some schools are receiving funding to
offset dial-up costs.

# **Integrating Other Systems**

• T-1 and Desktop Video conferencing equipment will be ordered at the end of June. This equipment will allow connection of the ICN to other networks and allow delivery of multimedia products from remote servers.



# Underserved Learners

Objective 2: Reach underserved learners throughout the US and its affiliated territories

Outcomes listed under this objective include (1) access to programs by different types of learning communities, and (2) providing learners of all ages with opportunities to participate in educational activities.

Appendix D contains information about each of the school districts connected to the ICN or to Internet. Information related to use of the ICN can also be found in Appendix D.

# **Description of Sites Connected**

- 52 of 160 (33%) Iowa school districts classified as Chapter One concentration sites have access to an ICN video classroom. 25 of these districts (16%) have been provided with Internet access.
- 25 of 95 (26%) school districts where more than one-third of the students qualify for free or reduced lunches, have access to the ICN, while 43 of 107 (40%) districts where one-fourth to one-third of the students qualify have access.
- 13 of the 95 (14%) districts with one-third or more of the students qualifying for free and reduced lunches now have access to Internet, as do 17 of the 107 (16%) districts with one-fourth to one-third of the students qualifying.
- 42 of 67 (63%) of the school districts with concentrations of minority students have access to ICN video classrooms, while 21 (31%) have Internet access.
- 20 of 26 (77%) of the school districts with concentrations of students with limited English proficiency have access to ICN video classrooms and 5 (19%) have Internet access.
- 17 of 45 (38%) school districts in counties with high poverty rates (over 20% of 17-year olds and younger living in poverty) have access to the ICN, while 10 of these districts (22%) have Internet access.
- 15 of 163 (9%) of small school districts (enrollments less than 600) have access to the ICN and 16 (10%) have access to Internet.



## System Use

- Total hours of use of the ICN by semester has increased from 16,000 hours in Fall, 1993 to 56,000 hours in Spring, 1996. K-12 use of the ICN accounts for approximately one-fourth of the total use of the system. Administrative use accounts for another 15-20% and higher education use accounts for a little over half.
- 67 courses were offered over the ICN in Fall, 1993 compared to 166 in Fall, 1995. Course offerings have been in a variety of content areas. There has been an increase in the use of the ICN for offering K-12 courses. Seven K-12 courses were offered in Spring, 1994; 16 in Fall, 1994; 19 in Spring, 1995; 32 in Fall, 1995; and 36 in Spring, 1996.
- There has been increased use of the ICN to deliver staff development to K-12 teachers. Seven staff development opportunities were reported in Fall, 1995 and 11 in Spring, 1996.



# Instruction

Objective 3: Expand instruction in core subject areas as well as literacy skills and vocational education.

Outcomes listed under this goal include (1) making a variety of educational opportunities available, (2) providing training that fosters the use of instructional methods that integrate technology into the curriculum, and (3) improving student skills and technology awareness.

Information related to exemplary technology applications can be found in Appendix B. Information about use of the ICN for courses and instructional activities and about schools participating in ICN courses can be found in Appendix D. Information on project supported instructional events is in Appendix F.

## **Educational Opportunities**

- 67 courses were offered over the ICN in Fall, 1993 compared to 166 in Fall, 1995. Course offerings have been in a variety of content areas. In Spring 1994, there were two Language Arts courses and one course each in the areas of social sciences, math, art, foreign language, and vocational education. In Spring, 1996, there were five social science courses, seven math courses, one art course, nine foreign language courses, three language arts courses, two science courses, and nine vocational education courses.
- School districts participating in courses offered over the ICN during Spring, 1996 included 28 Chapter One concentration districts, 18 districts with concentrations of minority students, 11 districts with concentrations of students with limited English proficiency, 37 districts with one-fourth or more students qualifying for free or reduced price lunches, 12 districts in counties with high poverty rates, and two small school districts (enrollments less than 600 students).
- The ICN has been used to provides hundreds of one-time educational events for students, ranging from 150 to 700 events offered per semester.
- The project has sponsored several instructional activities including one on pet care, three on music, and a collaborative project among three schools on fossils. Additional events are planned. 561 K-12 students participated in these instructional activities.



# Integrating Technology Into the Curriculum

- Surveys were used to identify 278 examples of technology use in K-12 schools. 19 of these examples were selected as exemplary applications and provided with additional funding to continue activities. Information about the exemplary applications was placed on the IOWA database and a booklet is being developed for distribution.
- Among the technology application submissions were 74 for elementary schools, 78 for middle schools, 107 for high schools, and 19 for community colleges. Among the 19 applications identified as exemplary, there were six for elementary school, eight for middle school, seven for high school, and four for community college. Subject areas covered in the funded exemplary applications included language arts (8), science (4), social studies (5), math or computer science (3), vocational education (1), art (2), and foreign language (1).
- Applicants used a variety of media. Computer software was the media most used among the applications. Many projects used a combination of media. Among those funded, nine involved use of Internet, eight multimedia, and seven computer software.
- Four showcases were held to allow those identified as having exemplary projects to share their ideas with fellow teachers. Three of the showcases were held over the ICN and included a total of 58 sites. One showcase was held on-site. Total attendance at the showcases was approximately 270.
- Nine regions provided local opportunities for staff development in the use of technology, including training on use of the ICN and Internet, training for networking support specialists, help desk training, training on HTML, troubleshooting training, and training of technology leaders. Participants were asked to complete surveys. Responses indicated that the staff development opportunities were worthwhile.
- Two regions funded mini-grants to local schools for adapting curriculum to incorporate technology. 35 mini-grant projects have been initiated.
- Regional coordinators report changes in the curriculum as a result of the project and an increase in the use of technology in the classroom.
- Regional coordinators report an increase in the number of staff development opportunities available using the ICN and higher participation rates attributed in part to convenience and savings in time and money that individual teachers and districts realize through taking advantage of staff development at a distance.



# Professional Development

Objective 4: Provide professional development that is sustained over a period of time.

Outcomes listed under this objective include (1) providing opportunities for teachers and educators to participate in staff development, (2) changing educational practices, and (3) continuing demand for technology in the schools.

Appendix C and Appendix D contain information related to regional professional development activities and local demand for technology. Information about technology training activities is in Appendix E.

# Staff Development Opportunities

- Nine regions provided local opportunities for staff development in the use of technology, including training on use of the ICN and Internet, training for networking support specialists, help desk training, training on HTML, troubleshooting training, and training of technology leaders. Participants were asked to complete surveys. Responses indicated that the staff development opportunities were worthwhile.
- Computer training workshops (i.e. learning how to use PowerPoint) are occurring across the state.
- Regional Coordinators report that AEAs are able to offer more inservice opportunities to teachers using the ICN. They also report increases in attendance at inservices which they attribute to the convenience of teachers not having to travel.
- A Help Desk training session was offered to 15 sites over the ICN. There were approximately 25 attendees; half were media directors and the other half were AEA technology specialists, secretaries, and switch board operators. Participants rated the content, the organization of the session, the presenter, and the delivery system positively. Suggestions for future training sessions included expanding the content, providing more specific information prior to the session, and allowing time for participants and the instructor to become more familiar with the nuances of the equipment at the individual sites.
- Three five-hour room manager training sessions have been held. Among the 48 participants were site monitors, media specialists and administrators. Participants liked the overall quality of the workshops, the quality and organization of the handouts, and being able to see and work with the equipment. Suggestions for improvement include providing more opportunities for hands-on activities, breaking the session into shorter segments, and discussing non-technical site monitor problems.



• 30 participants attended a training session on local and wide area networks. Participants included telecommunications and media specialists, consultants, engineers, and teachers. A majority (over 50%) of the participants felt that the length of the training was about right (52%), the session was easy to follow (78%), participant's understanding was improved (85%), the trainer was effective (89%), enough time was allowed for questions (81%), and effective materials were provided (74%). About 25% of the participants thought the session was too short and 25% felt they left the session unsure as a trainer.

## Change in Schools

- Regions are reporting progress in integrating technology into the schools. Plans were submitted by each of the 15 regions in the state outlining how they would spend regional allocations. Regions opted to focus their resources in different ways, for example, some spending their allocations primarily on Internet support and others on staff development. Activities in the regions occurred in five areas: (1) purchase of video classroom equipment for schools connecting to the ICN, (2) funding to offset purchase of equipment for schools to connect to Internet or costs associated with dial-up Internet connections, (3) regional staff development activities, (4) technical support and assistance provided to schools, and (5) curriculum development integrating technology.
- Regional coordinators report assisting local schools in planning and preparing for connection to the ICN and/or Internet and report that increasing numbers of schools are requesting assistance with planning. The project has been effective in encouraging schools to invest in new technologies.
- Six regions are using project funding to assist schools with technology planning or technical support. Two AEAs have hired specialists or consultants to assist schools with installing, configuring, and maintaining equipment. One has established a help desk while another has purchased software to provide technical assistance. One AEA conducted a LAN analysis for each school district in the region while another provides meetings between the AEA media advisor and area schools to discuss technology needs.
- Site visits and other activities of the TEA have encouraged teacher educators to integrate distance learning technologies into the teacher education curriculum.



# Continuing Demand for Technology

- Regional coordinators reported that an increasing number of schools are requesting assistance with technology planning and that the Star Schools project has provided the impetus for many schools to move forward with plans to connect their classrooms and buildings through LANs and WANs.
- Regional coordinators report local satisfaction with the distribution of funds and indicated that these funds have been a catalyst for increasing demands from schools for Internet connections and assistance with technology planning.
- Regional coordinators report that Star Schools activities have been a catalyst
  for schools to focus their attention on the integration of technology. They
  report an increase in demands for connections and frustrations with time
  delays. In addition, the coordinators report increased use of both ICN and
  Internet technologies in schools that are connected.
- 262 school districts will have access to an ICN site in their district by 1997. In addition, the Iowa Braille School, the School for the Deaf, the Mennonite School, and a correctional facility will be connected. Another 56 sites are scheduled for connection in Fall, 1996 and approximately 120 will be connected the following year.
- Among 382 school districts, 72 have been connected to Internet since the project began. An additional 85 are scheduled to be connected next year.



# Electronic Technologies

Objective 5: Employ a variety of electronic technologies and tools for distance education.

The outcome listed under this objective is to increase use of a variety of electronic technologies and tools and participation in distance education among educational institutions.

See Appendix A for information related to development of multimedia applications and Appendix C for information related to regional technology use.

- Educational institutions acquiring funds for distance education technologies through the Star Schools project have included regent universities, community colleges, AEAs, and LEAs. Technologies provided include equipment for use in the ICN video classroom and equipment needed to assist schools in connecting to the Internet.
- 12 regions have distributed additional funds to local schools to help support
  Internet connections. Funds were provided for routers, switching devices,
  servers, direct connection costs, and dial-up costs. One region is developing a
  technology-teaching classroom for use in training teachers in a variety of
  technologies.
- The project was successful in funding six proposals to develop multimedia instructional materials to be used over the ICN. 39 proposals were submitted and six were selected for funding. Applications received included four from regent universities, four from community colleges, 10 AEAs, and 21 from local school districts. There were six private colleges participating as project partners. The applicants awarded funds included two community colleges, two AEAs, one regent university, and one local school district. 71 Iowa schools were included as partners in these projects. Other partners in the funded projects include a second regent university, other AEAs and community colleges, several private companies, the Workforce Development Center, the North Central Regional Educational Laboratory (NCREL), and the Vermont Exemplary Program.
- Funded projects involved development of (1) curricula for high school equivalency education and career planning to be offered over the Iowa Communication Network (ICN) and World Wide Web (WWW), (2) interactive mathematics products for middle school students, (3) a foundations course for a Career Academy to be offered over the ICN, (4) interactive chemistry units for use in high schools, (5) instructional units in environmental science, and (6) ten teacher developed instructional units adapted from existing elementary, middle school, and high school curricula in a variety of content areas.



# **Partnerships**

Objective 6: Foster partnerships

Outcomes listed under this objective include (1) involving a variety of entities in partnerships, and (2) fostering collaboration.

Appendix C contains a summary of the regional coordinators' survey.

- A variety of entities are involved in the Iowa Star Schools project including Iowa Public Television (IPTV), the Iowa Department of Education, Iowa community colleges and AEAs, the state's regent universities, private colleges and universities, and local school districts. Several of these groups have representation on the Partners Council, the group that provides leadership for the Iowa project. Groups currently represented on the Partners Council include IPTV, AEAs, Iowa Department of Education, and two of the three regent universities.
- Regional coordinators report improvements in collaboration among educational entities within the regions. They report improvement in collaboration and cooperation between AEAs and local schools and particularly between AEAs and community colleges. There has also been increased sharing and cooperation among schools and among teachers and across educational levels. Regional coordinators report that regional technology councils have provided a vehicle for improved communication and increased collaboration.
- TEA activities have promoted partnerships and collaboration among preservice teacher education programs.

# Cost-Benefit

Objective 7: Demonstrate improved cost benefit ratio.

The outcome under this objective is to determine the value of the project.

Appendix C contains a summary of the regional coordinators' survey.

 Regional coordinators report savings in time and travel costs for teachers attending regional inservice activities.



SECTION III:

CONCLUSIONS



# **Conclusions**

Based on the data collected for the Iowa Distance Education Alliance (Iowa's Star Schools project) evaluation report for October, 1995 to May, 1996, the following conclusions can be made:

The Iowa Star Schools project has successfully identified exemplary applications of technology in education and efforts are being made to disseminate this information to teachers via the World Wide Web. These projects provide models for the integration of technology into the K-12 curriculum.

Six projects to develop multimedia curriculum products for use in distance education are underway and although it is too early to determine their impact, these products are designed to further integrate technology into the K-12 classroom.

As schools observe the possibilities provided by the Iowa Communications Network (ICN) and the Internet, demand for connections grows. More and more school districts are committing the resources necessary to fund ICN classrooms and Internet connections. The Iowa Star Schools project is credited with moving schools more quickly into integrating technology and with focusing regional technology efforts. The project has given the issue of technology in the schools greater visibility.

The focus of infrastructure development at the local level has shifted from providing access to interactive video classrooms to providing access to the Internet. Many schools are planning for local and wide area networks (LANs and WANs) to meet the future technology needs of the school. Area Education Agencies (AEAs) are reporting more K-12 interest in Internet use than in ICN classroom use.

K-12 use of the ICN and of the Internet is increasing. Schools are offering more courses in a variety of subject areas via the ICN. Instructional activities using the ICN video classroom are becoming more prevalent. More schools are connected to the Internet.

The Iowa Star Schools project has provided several instructional activities over the ICN. These activities have provided unique opportunities for students.

Underserved learners including low income, limited English proficient, Chapter One, minority, and those attending small rural schools have been provided with a means to broaden their horizons through access to the ICN and to Internet.

Several action research projects have been funded that may provide further insights into or suggestions for the use of distance education in Iowa.



Those involved in the Iowa Star Schools project have taken a leadership role in providing local schools with technology training and in assisting schools with technology planning. A variety of technology training activities have been provided, including training in how to use the ICN classrooms, Internet training, Help Desk training, LAN/WAN training, and computer training.

Distance education has provided more opportunities for teachers to participate in staff development programs. Convenience and savings in time and money have resulted in increased participation rates for inservices offered over the ICN.

Efforts are underway to assist public and private colleges and universities in integrating technology, specifically distance education, into their teacher education programs. Workshops and campus visits appear to be positively received. Opportunities for teacher education faculty to attend additional technology training has been provided.

The IOWA Database continues to expand to provide information to educators around the state. More people are accessing the IOWA Database.

Attempts are underway to address some of the scheduling difficulties noted in the first Iowa Star Schools project. New scheduling software has been purchased and is being pilot tested.

The Iowa Star Schools project has increased the level of collaboration among educational entities at all levels and has provided a focus for regional technology activities.

Continued funding is seen as necessary to ensure equity for schools connecting to the ICN or Internet in the future and to continue the activities started with this project.

Regional activities are viewed from a local perspective with locally involved participants largely unaware of the statewide project. Participants are satisfied with the helpfulness of Iowa Public Television (IPTV) staff. They do not perceive IPTV as the coordinator of a statewide project, but rather as a resource on which local participants can depend.

Time is a constraining factor in implementing large technology projects. Activities often take longer than anticipated and changed timelines in one area can impact the ability to carry out other activities.



SECTION IV: APPENDICES



# Appendix A:

## Multimedia Projects

Request for Proposals

List: Multimedia Curriculum Project Proposals

Submitted and Review Results

List: Star Schools Reviewers

Chart: Reviewers of Multimedia Curriculum Project

Proposals by Educational Level

Invitation to Review

Information for Grant Reviewers

Iowa Technology-Based Curriculum Development

Projects Reviewer Instruction Sheet

Iowa Technology-Based Curriculum Development Projects Ratings Sheets

Chart: Submitted and Funded Multimedia Curriculum

Projects by Education Level

Summary of the Funded Multimedia Curriculum Projects



## REQUEST FOR PROPOSALS

# Iowa Technology-Based Curriculum Development Projects Funded by the Star Schools Grant Program R203F50001-95

RFP Release Date: November 10, 1995 Proposal Due Date: January 17, 1995

Award Level: Up to \$200,000 per project

Number of Awards: A Goal of 6 Awards, Depending upon Budget

Start Date: No later than March 1, 1996

Completion Date: Anticipated to be September 1, 1997

#### **Abstract**

Through the federal Star Schools Grant (R203F50001-95), the Iowa Distance Education Alliance hopes to award at least 6 technology-based curriculum development grants to collaborative partnerships in Iowa. The purposes of the awards will be to develop instructional units at elementary or secondary curricular level that utilize educational technology tools. The ideal project would demonstrate a collaborative partnership between one or more LEA's, AEA's, higher education, and perhaps a public or private sector company or agency in the development of a project that would utilize the ICN, networking technology, CD-ROM, or related interactive hardware and software in the teaching of aspects of elementary and/or secondary curricula. The ideal project might also focus on a unique Iowa approach or utilize unique Iowa resources in the design of the project. The project would also be designed in a way that would allow it to be disseminated to other schools in the State and perhaps be marketed outside Iowa. The project would also have a strong evaluation component that would document the developmental process for the project and outline methodology for tracking outcome effectiveness.

#### **Background**

The Iowa Communications Network is now being deployed to all K-12 school districts in the State. Over the next 4 years connectivity will be available to every district, with approximately 25% of the districts being connected to the ICN in each year. ICN connectivity promises to bring opportunity for adding several resources to the districts including interactive video, Internet connections, local and wide area networking and increased use of instructional technology. Educational leaders in the State are also exploring additional funding mechanisms to provide increased access by students to desk-



top workstations and related educational technology-based hardware and software. Educators are also exploring ways to increase the development of interactive multimedia-based curriculum that can be used by and disseminated between schools. The development of such curriculum requires access to planning, training and development resources and new collaborative partnerships between schools that have not existed previously. The purpose of this component of the Star Schools grant will be to establish and demonstrate a mechanism for interactive multimedia curriculum development that will result in the dissemination of several curriculum packages throughout the State. A secondary purpose of this component will be to develop strategies to keep development projects occurring past the funding cycle of the grant.

#### **Long-Term Objective**

The overall objective of this program is to utilize educational technology for the improvement of teaching and learning. A major purpose of this pilot project will be to provide Iowa schools with technology-based curriculum developed by Iowa educators within a relatively short period of time. A secondary purpose will be to establish a curriculum development process, utilizing instructional technology, which can serve as a model for future development. The results of this process will be a "virtual" Iowa technology-based curriculum development plan. The longer-term objective will be to attract grant and foundation support that can be used to continue the development of these "Iowa" products for further state and national dissemination.

#### **Project Objectives**

Through the Star Schools grant program, a funding pool of nearly \$1.2 million has been established to fund curriculum development projects. Depending upon budget and the quality of the proposals, we intend to fund about six projects at or near the \$200,000 level. However, proposals with total budget requests over or under this amount will be considered. The awards will be made competitively, and in consideration of the following objectives:

- 1.) Projects will address a significant curricular need at the elementary and/or secondary level. Successful projects will demonstrate the extent to which curricular and/or instructional needs in math, science, communication skills, school-to-work programs, or other significant discipline areas will be met by the use of technology-based instructional systems or processes.
- 2.) Projects will utilize interactive instructional technologies in effective and significant ways in accomplishing the teaching and learning objectives.



- 3.) Projects will be collaborative in nature. Successful projects will indicate how school districts, area education agencies, higher education, and perhaps, public or private sector companies or agencies will work together, sharing responsibilities and expertise in the development of the project.
- 4.) The product(s) from each project must be in a form that can be disseminated to other schools throughout the State. Additionally, the successful projects should have the ability to be disseminated or marketed to other schools outside the State.
- 5.) The successful project will include an evaluation component which can document the process used to develop the project and also to examine the effectiveness of utilizing the product in the classroom and how the product will improve teaching and learning.

#### Eligible Applicants

Any Iowa public Local Education Agency, Area Education Agency, Community College, or Regent institution is eligible to apply for an award. Collaborative partnerships may also include private educational institutions, other public or private agencies, foundations and/or private sector companies, however each proposal must have a single agency designated for budgetary and communications purposes and that agency must meet the criteria as outlined above. Also, each proposal must include a Local Education Agency as a collaborative partner.

#### <u>Proposal Format</u>

Proposals should follow the following format. Proposals should be as succinct as possible, not exceeding a total of 50 pages as follows: Cover Sheet (1 page), Narrative (no more than 15 pages), Budget Narrative (no more than 5 pages), and Support Materials (no more than 29 pages). Proposals exceeding 50 pages will not be excluded from consideration, however only the first 50 pages will be reviewed. Please include the original and two copies of the proposal in your submission.

- A.) Proposal Cover Sheet: Complete the cover sheet as indicated. This will be the first page of the proposal.
- B.) Proposal Narrative: The narrative must not exceed 15 pages and should include the following information-
  - 1.) Project summary (including project objectives-1 page maximum)



- 2.) Statement of need (How important is the project? What criteria were used in selecting the curricular/instructional area(s) addressed by this proposal? How does the applicant anticipate improvements in teaching and learning through the implementation of this project?)
- 3.) Technology(ies)/processes employed to meet the need (Why was/were these technology(ies) selected? How will their use address the need? Does the process involve utilizing unique Iowa resources or perspectives? If specific technologies are not yet selected, how will they be determined?)
  - 4.) Project work plan (how will the project be conducted? Who will conduct the project? What are the significant activities and timelines for completing the various phases of the project?)
  - 5.) Demonstration of collaboration (Who are the project partners? What expertise does each partner bring to the project?)
  - 6.) Dissemination (How can the product(s) developed by this project be disseminated to other schools in Iowa?)
  - 7.) Evaluation plan (Explain how the process used to develop this project will be documented. Fully describe how the effectiveness of using results of this project with students will be examined. How will improvements in teaching and learning be determined?)
  - C.) Budget Narrative: Applicants should include a brief budget narrative, not to exceed 5 pages, which provides the following information:

#### 1.) Total Grant Request

the

- 2.) Other sources of project support (While not required, in-kind contributions and cash matches can be helpful in increasing the scope of a project. Please describe any sources of matching funds and, if applicable, the percentage of each line item attributed to other sources of support.)
- 3.) Equipment (i.e. computer hardware, production equipment, etc. It should be noted that this is not an equipment grant, per se. In most instances, the equipment budget should not exceed 15% of the total request, with no single equipment item exceeding \$5,000. Please fully describe the need for any equipment purchased under this grant.)
- 4.) Supplies and materials
- 5.) Contracted activities (i.e. production, development)



- 6.) Lease/Rental/Installation (i.e. equipment, networks, facilities)
- 7.) Software acquisition (i.e. purchase/lease)
- 8.) Talent/Royalty fees
- 9.) Travel (please separate in-state and out-of state costs and include the purposes of any project travel)
  - 10.) Personnel (please describe any full or part time staff utilized for this project and the percentage of time devoted to the project by each. Also include any consultants to be utilized along with the purpose and per diem costs of such consultants.)
  - 11.) Dissemination/evaluation costs (please describe any other costs related to dissemination or evaluation not included in any of the above categories.)
- D.) Support Materials: Please include any other support materials that will further enhance or elaborate project needs, activities or objectives. Include any letters of support from project partners, or others, which would help describe the project. Also, include any descriptive materials about the project applicant and partners.

#### Ownership/Usage

Ownership of the materials developed under this grant program will remain with the developers. However, materials developed through this Star Schools project must be available to be disseminated to other schools and colleges on a cost basis without restriction. Talent, royalty and usage fees for any material developed as part of this project should be determined with that requirement in mind. This expectation would not extend to the use of any pre-existing software that is adapted for use by the project where copyright has already been established. Please describe any special considerations regarding ownership and/or usage in the support materials section of the proposal.

#### Evaluation Criteria

Proposals will be evaluated on a point system. A <u>maximum of 200 points</u> can be awarded for each proposal. Points will be awarded on the following basis:

A.) Demonstration of need: What is the demonstrated need for technology-based projects in this curricular area? How do the project objectives address



improvement of teaching and/or learning through the development of this project? 40 points.

- B.) Technology(ies)/Processes utilized: What is the significance of the use of technology in addressing this need? Will the project be demonstrating effective or creative uses of technology in addressing the need? Will the project involve the use of unique Iowa applications or resources in the processes utilized? 40 points.
- C.) Collaboration/Partnership plan: How will each of the partners be involved in the overall project? Is the collaboration/partnership an integral part of the process? 20 points.
- D.) Work plan: Is the work plan realistic? Will the plan result in a project that meets its stated objectives and be completed in a timely manner? 20 points.
- E.) Dissemination Plan: How will the resulting material be disseminated to other schools and colleges in Iowa? How will others use the resulting material? 15 points.
- F.) Evaluation Plan: How will the processes used to develop the project be documented? How will the effectiveness of student utilization of the product be tested? How will the use of this project improve instruction and student learning and/or achievement? 30 points.
- G.) Budget: How realistic is the budget for the project being proposed? Does the project demonstrate cost effectiveness? 25 points.
- H.) Project Support: Does the project have support from the host institution and from the project partners? 10 points.

#### Project Timelines and Expectations

Proposals are due no later than 5:00 PM on January 17, 1996. It is the responsibility of the applicant to ensure delivery by that time. Proposals received after that time will be not be considered. Faxed or E-mailed proposals will not be accepted. Proposals should be delivered to:

Office of the Director Iowa Department of Education Grimes State Office Building Des Moines, IA 50319 Attention: Rich Gross

Re: Technology-Based Curriculum Development Projects



Questions regarding this RFP can be directed to either

Rich Gross, Office of Technology Iowa Department of Education 515-281-5295 E-mail: grossr@crpl.cedar-rapids.lib.ia.us

-Or-

Pam Johnson, Educational Telecommunications Iowa Public Television 515-242-4180 E-mail: pam@iptv.org

Note: The deadline for submitting questions concerning this RFP is 5:00 PM, January 5, 1996.

<u>Potential applicants</u> are requested to send a post card to Rich Gross at the address listed above <u>bv</u>, <u>December 1</u>, with the following information:

- -Name of contact
- -Address
- -Telephone and fax number
- -E-mail address (if available)
- -Reference: Iowa Technology-Based Curriculum Development Projects (R203F50001-95)

While not required, it will be helpful to have an estimate of the number of potential applicants. Also, any future information regarding this RFP will be sent only to those individuals who have indicated that they are potential applicants. This will significantly reduce postage expenses. Should there be sufficient interest, a question and answer session might be arranged over the ICN regarding this RFP. Please indicate on the card whether such a session might be helpful.

It is expected that project evaluations will be conducted during the later part of January and early February 1996, with announcements concerning funding to be made in later February. It is expected that projects will commence by March 1. Successful applicants will be expected to complete an agreement with the Department of Education. Pending approval from the US Department of Education, it is anticipated that completed projects will be due at the Department by September 1, 1997, or sooner if possible. Because of



the importance and scope of these projects, and the duration allowed for development of them, semi-annual progress reports are expected by the Department.

#### Number of Proposals

Depending upon quality and scope of the proposals, it is anticipated that proposal requests will be around \$200,000, however larger and smaller requests will be considered. The total number of awards will be based upon the final budgets, however it is hoped that at least 6 awards will be made. Potential applicants can submit more than one proposal, however each proposal can include only one project.

#### Scope of Instructional Material

Projects may include whole courses, instructional units relating to one discipline, and/or instructional units that are multi-disciplinary. The decision concerning the scope of the instructional material will be made by the applicant and should be related to the needs and objectives of the project, and the resources available.



## <u>Iowa Technology-Based Curriculum Development Project</u> (Star Schools Grant Program R203F50001-95)

## PROPOSAL COVER PAGE

1.) Applicant I	nformation			
Institution Nam Address:	e:			
Contact Name:			1	
	Telephone	#	Fax #	
2.) Collaborati	ing Instituti	ons/agencies/	/companies (please list)	:
3.) Project Abs	stract:			
		_		
Total Matc Source of I	h (if any): Match:	_		
Total Proje	ect Budget:			
5.) Signature of	of Applicant	t: Name		
		Title	Date	



#### Multimedia Curriculum Project Proposals Submitted and Review Results

Applicant	Region Higher Ed. Partner(s)		AEA	Private	Score
			Partner(s)	Partner(s)	
Des Moines Area CC	11	Des Moines Area CC	None	Yes	931
Northern Trails AEA	2	UNI	AEA 2	Yes	910
Kirkwood CC	10	Kirkwood CC	AEA 10	None	874
ISU	11	ISU	AEA 11	None	855
Dubuque CSD	1	None	None	Yes	842
AEA 6	6	UNI, Iowa Valley CC	AEA 6	Yes	834
Eastern Iowa CC	9.	Eastern Iowa CC	AEA 9	Yes	816
Keystone AEA	1	Northern Iowa CC, Luther College	AEA 1	Yes	811
Jefferson-Scranton CSD	5	Iowa Central CC, Buena Vista	AEA 5	Yes	784
UNI	7	UNI	AEA 7, 10, 11	None	770
U of I	10	U of I	AEA 1, 10	·None	734
Mason City CSD	2	North Iowa Area CC	None	None	726
Iowa Lakes CC	3	Iowa Lakes CC, Briar Cliff	None	Yes	725
Davenport CSD	9	St. Ambrose, Teikyo Marycrest	AEA 9	Yes	720
Mississippi Bend AEA	9	None	AEA 9	Yes	707
Northwest Iowa AEA	4	Northwest Iowa CC, Western Iowa Tech	AEA 3, 4, 5, 12	Yes	705
Heartland AEA	11	None	AEA 11	Yes	675
	11	U of I, Des Moines Area CC	AEA 11	Yes	651
Ankeny CSD Spenser CSD	3	Iowa Lakes CC	AEA 3	Yes	646
Grant Wood AEA	10	ISU	AEA 10	Yes	641
Washington CSD	10	U of I, ISU	AEA 10	Yes	629
Indianola CSD	11	None	AEA 11	Yes	625
Albia CSD	15	None	None	Yes	623
	3	Iowa Lakes CC	AEA 3	Yes	621
Emmetsburg CSD	10	None	None	Yes	613
Cedar Rapids CSD Battle Creek-Ida Grove CSD	12	None	AEA 12	Yes	606
ļ.	10	U of I, ISU	AEA 10	Yes	594
Washington CSD UNI	7	UNI	AEA 1	Yes	564
Great River AEA	16	Southeastern CC	AEA 16	Yes	561
Norwalk CSD	11	Drake University	AEA 11	Yes	551
	14	Southwestern CC	AEA 11 AEA 14	Yes	550
Green Valley AEA	1 1		None	Yes	541
West Delaware CSD	11	None None	AEA 11	None	517
Ames CSD	i	None	AEA 16	Yes	496
Ft. Madison CSD	16 10	Kirkwood CC	AEA 10	None	481
Iowa Valley CSD	13		AEA 13	Yes	459
Council Bluffs CSD	1	None None	AEA 13	Yes	435
Logan-Magnolia CSD	13		AEA 15	None	377
Southern Prairie AEA	15	None Maminacida Callaga		ł	i
Sergeant Bluff-Luton CSD	12	Morningside College	AEA 12	Yes	367



#### **Star Schools Reviewers RSVP**

Karlene Garn Ames Community Schools 1616 Truman Drive Ames, IA 50010

Dan Mart MOC Floyd Valley Comm. Schools 511 6th Avenue Alton, IA 51003

Jim Verlengia Lewis Central Comm. Schools 40 James Drive Council Bluffs, IA 51503

Wendell Maakstad Kirkwood Comm. College Box 2068, 6301 Kirkwood Blvd. SW Cedar Rapids, IA 52406

Jerry Deegan Dowling High School 1400 Buffalo Rd. W. Des Moines, IA 50265

Pearl Miller BCLUW Comm. Schools Box 670 Conrad, IA 50621

Diane Petty BCLUW Comm. Schools Box 670 Conrad, IA 50621

Susan Jacob Charles City Comm. Schools 500 N. Grand Avenue Charles City, IA 50616

Marcia Bankirer (Possible) lowa State University 108 Scheman Ames, IA 50011

Paul Bowers
Buena Vista University
610 W. 4th Street
Storm Lake, IA 50588



4 C

Linda Upmeyer N. Iowa Mercy Health Center 84 Beaumont Drive Mason City, IA 50401

Robert Hardman University of Northern Iowa Educational Media Cedar Falls, IA 50614

Jennifer Lindaman N. Tama Community Schools 508 Toledo Traer, IA 50675

Darlas Shockley Indian Hills Comm. College 525 Grandview Ottumwa, IA 52501

Stanley Scheiding
College Community Schools
401 76th Avenue SW
Cedar Rapids, IA 52404

Kathy Oakland 114 Price Lab School University of Northern Iowa Cedar Falls, IA 50613

Tony Spencer
Ft. Madison Comm. Schools
1930 Avenue M
Ft. Madison, IA 52627

Dennis Sychra
Denison Community Schools
819 N. 16th St.
Denison, IA 51442

Becky Raasch Bridgewater-Fontanelle Comm. Schools Box 234 Fontanelle, IA 50846

Shirley Kelly Northern Trails AEA #2 Box M Clear Lake, IA 50428



Cal Halliburton Ames Comm. School Dist. 1128 Roosevelt Ames, IA 50010

Susan Olesen Greenfield Elem. School 324 N.W. 2nd Street Greenfield, IA 50849



Health Center

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Reviewers of Multimedia Curriulum Project Proposals by Educational Level

14

 $14 \pm$ 

#### **INVITATION TO REVIEW**

To: Potential Star Schools Curriculum Development Grant Readers

Fr: Rich Gross, Office of Technology

Re: Invitation

Date: January 11, 1996

I would like to invite you to be a reviewer for the Star Schools Technology-Based Curriculum Development Project grants. This is an important task and brings an opportunity for you to help select projects that will provide a significant new body of instructional resources for Iowa students and teachers.

We are aware that many of you may be submitting proposals for this project. Therefore, we are going to use a review procedure that is similar to the one used by the US Department of Commerce. We will ask that you disclose all proposals in which you or your institution have a direct interest. Your portion of the review process will not include any of those proposals. Proposals will be evaluated on a point system using specific criteria and a ratings sheet. You will receive instructions to help guide your review.

Should you be selected as a reviewer, you will be sent a group of proposals to rate. These will be sent to you in early February. You will also be assigned to a review team. The teams will meet starting the evening of February 14, and will continue during the day of February 15. We will also reserve the morning of February 16 should the process take that long. All of your expenses, including meals, hotel and transportation, will be reimbursed. We also ask that those of you who would require a substitute for your classes to let us know and we will help cover that cost as well.

Overall, we will select 15 reviewers and 5 alternates. In making the final selection we will be looking at factors such as balancing by institutional type, region, gender, etc., based upon those of you who indicate interest in reviewing. This is a very important task, and I appreciate your consideration. If you are interested in being considered, please contact me by phone (515-281-5663, or 515-281-5295), fax (515-281-4122) or e-mail (rgross@max.state.ia.us) no later than January 31, 1996. Thank you.



#### **Information for Grant Reviewers**

- 1.) They will be assigned to one of three review teams. There will be five members plus a facilitator for each team.
- 2.) We will send them a group of grants to review in a couple of days. In addition, there will be an instruction sheet and ratings sheets. They are to complete them by the time we have the team meetings.
- 3.) The team meetings will be held starting at 6:00 pm on February 14th, and will run the whole day on the 15th. We hope to be done by then, but we have also reserved the morning of the 16th just in case.
- 4.) The meetings will be held at the Inn on Merle Hay. They need to phone in their room reservations ASAP. The Inn is holding a block of rooms under the name "Star Schools." The phone number is 515-276-5411.
- 5.) They will be reimbursed all expenses including travel. If they are a teacher and require a substitute, please send us the cost information and we will reimburse their school.
- 6.) The teams have been put together balancing education level, geography and gender, so it is important that they complete this task and come for the team meetings.
- 7.) We need to know if they or their school (AEA or college) were involved in any of the grants so we will not send them any of those. Please make a list of those for each reviewer.
- 8.) Please make sure we have their correct mailing address so we can send them the proposals to review.
- 9.) Each person will review 13 proposals.
- 10.) There will be information about where to meet at the hotel when they check in (or check the signs in the hotel).



### Iowa Technology-Based Curriculum Development Projects

#### Reviewer Instruction sheet

Thank you for your participation in this process. Through your efforts, several projects will be funded that will result in new technology-based curricula for Iowa schools. Please review this instruction sheet carefully. *If you have any questions during the review process, please call Rich Gross at 515-281-5663 or 319-363-5024*.

- 1.) Please review the materials you received. Included in this package should be thirteen (13) grant applications. In addition, you should have received a copy of the original RFP, a copy of the project objectives, a copy of the proposal format, and several copies of the ratings sheets. Please feel free to make additional copies of the ratings sheets should you need them.
- 2.) This is a two-step process. The first step is for you to read and rate these proposals individually. We ask that you take some time between now and February 14th to do this review. You are part of a team. Four other reviewers are also reading the same group of proposals. The second step of the process will be the team meetings. This will happen the evening of the 14th and during the day on the 15th (and possibly into the morning of the 16th) at the Inn on Merle Hay. The Inn is located behind the North End Diner on Merle Hay just north of the I-80 exit. A block of rooms is being held under the name of "Star Schools." By now, you should have made your reservations. The phone number is 515-276-5411. Remember, you will be reimbursed for all expenses.
- 3.) During the team meetings you will have an opportunity to change your scores based upon the team discussion. You do not have to do this, but it is an option. A ratings change sheet will be provided at the team meeting for that purpose.
- 4.) Please take a moment to look at the proposals you have received. We have taken efforts to assure that you are not reviewing a proposal that you or your school have an interest in. If a mistake has been made, and you or your school have an interest in a proposal you have received, please do not review that proposal, and let us know immediately.
- 5.) Prior to reading the proposals, please review support materials that you have received. Start by reading the RFP. That should give you a good sense of what we are looking for in the proposals. We have also sent you sheets containing the project objectives and the proposal format. These have been taken from the RFP. It is a good idea to keep these in front of you as you review the proposals. Always ask yourself whether the proposal you are reading addresses the objectives of the project, and whether all of the information requested in the proposal format is included.



6.) Take a moment to review the ratings sheet. The ratings criteria that were included in the RFP are reproduced here, along with the maximum points which can be awarded for each of the criteria (A - H). You will assign points for each of the criteria (points can be awarded from 0 to the maximum for each criteria). Remember, the scoring process counts on your judgment, based upon your interpretation of the RFP and your experience in education. Please award points based upon how well you believe the proposal addresses the criteria as stated. Use the following chart as a guide:

-Proposal does not address criteria at all
-Proposal does not address criteria well
-Proposal addresses criteria somewhat
-Proposal adequately addresses criteria
-Proposal is exemplary in addressing criteria

O points

Lower range score

Mid range score

Upper range score

Maximum score

- 7.) As you read each proposal, please keep these evaluation criteria in mind. When you finish reading the proposal, award points for each of the evaluation criteria. Use a separate ratings sheet for each proposal. The ratings sheets also give you space to discuss why you scored the proposal in the manner you did for each criteria. These notes will be helpful for you during the team meetings. Please add the points together for each of the criteria and place the total points score in the place provided on the first page of the ratings sheet. Remember that there is a maximum of 200 points which can be awarded for each proposal. Also make sure that you have entered the applicant name and your name in the spaces provided. Feel free to make additional copies of the ratings sheet if you need them.
- 8.) Applicants were given instructions concerning the length of the proposals. There was a maximum of 50 pages which were allowed. In order to be fair to all applicants, please disregard any material that exceeds the length guidelines as specified in the RFP.
- 9.) When you come to the Inn of Merle Hay for the team meetings, please make sure that you bring the proposals and your completed ratings sheets with you. You will need to refer frequently to these during the team meetings.
- 10.) Each team will have a facilitator to assist with the team meetings. The facilitator will explain the team meeting process during the orientation on the evening of February 14th.
- 11.) We are planning on having dinner together as a group that evening. Please plan on arriving at the hotel in time for a 6:00 PM activity. The hotel will have information about where we will be meeting.



## Iowa Technology-Based Curriculum Development Projects

## Ratings Sheet

Applicant:
Reviewer:
Total Points:
Evaluation Criteria
Proposals will be evaluated on a point system. A <u>maximum of 200 points</u> can be awarded for each proposal. Points will be awarded on the following basis:
A.) Demonstration of need: What is the demonstrated need for technology-based projects in this curricular area? How do the project objectives address improvement of teaching and/or learning through the development of this project? Maximum 40 points
Points Awarded:
Discussion:
<u>-</u>
·
B.) Technology(ies)/Processes utilized: What is the significance of the use of technology in addressing this need? Will the project be demonstrating effective or creative uses of technology in addressing the need? Will the project involve the use of unique Iowa applications or resources in the processes utilized? Maximum 40 points
Points Awarded:
Discussion:
Discussion:



C.) Collaboration/Partnership plan: How will each of the partners be involved in the overall project? Is the collaboration/partnership an integral part of the process?  Maximum 20 points
Points Awarded:
D'acceste a
Discussion:
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D.) Work plan: Is the work plan realistic? Will the plan result in a project that meets its stated objectives and be completed in a timely manner? Maximum 20 points  Points Awarded:
1 omis Awaitett.
Discussion:
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schools and colleges in Iowa? How will others use the resulting material? <u>Maximum15</u> points
Points Awarded:
Discussion:
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documented? How will the effectiveness of student utilization of the product be tested? How will the use of this project improve instruction and student learning and/or achievement? Maximum 30 points  Points Awarded:
Discussion:
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G.) Budget: How realistic is the budget for the project being proposed? Does the project demonstrate cost effectiveness? Maximum 25 points
Points Awarded:

E.) Dissemination Plan: How will the resulting material be disseminated to other



Discussion:
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•
H.) Project Support: Does the project have support from the host institution and from the project partners? Maximum 10 points
Points Awarded:
Discussion:



## Iowa Technology-Based Curriculum Development Projects

## Ratings Change Sheet

Applicant:	
Reviewer:	
Amended Total Points:	Original Total Points:
Evaluation Criteria	
the reason(s) for changing your score in	can be awarded for each proposal. Please explain the appropriate discussion spaces provided ria area, place the original points awarded in the ne blank.
A.) Demonstration of need: Maximum	a 40 points
Amended Points Awarded:	Original Points Awarded:
Discussion:	
<del></del>	
	<u> </u>
B.) Technology(ies)/Processes utilized	
Amended Points Awarded:	Original Points Awarded:
Discussion:	



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C.) Collaboration/Partnership plan	: Maximum 20 points
Amended Points Awarded:	Original Points Awarded:
Discussion:	
	<del></del>
•	<del></del>
D.) Work plan: Maximum 20 point	s
Amended Points Awarded:	Original Points Awarded:
Discussion:	
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Amended Points Awarded:	Original Points Awarded:
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'	
7.) Evaluation Plan: Maximum 30 po	oints .
Amended Points Awarded:	Original Points Awarded:
	•
Discussion:	
G.) Budget: Maximum 25 points	
	Original Points Awarded:
Amended Points Awarded:	
Amended Points Awarded:	



H.) Project Support: Maximum 10 points				
Amended Points Awarded:	Original Points Awarded: _			
Discussion:				



## Iowa Technology-Based Curriculum Development Projects

## Team Summary Sheet

Applicant:_					
Team #:	Facilitator:				
Total Poin	<u>ts:</u> (200 Poi	ints Maximu	m Per Revie	wer)	
R1:	+ R2:	+ R3:	+ R4:	+ R5:	= Total:
•		Average (I	Total/5) =		
A.) Demons	tration of No	eed (40 Poin	ts Maximun	ı Per Review	er)
R1:	+ R2:	+ R3:	+ R4:	+ R5:	= Total:
		Average (	Γotal/5) =		
B.) Technol	logy(ies)/Pro	cesses Utilize	ed (40 Point	s Maximum ]	Per Reviewer)
R1:	+ R2:	+ R3:	+ R4:	+ R5:	= Total:
		Average (	Γotal/5) =		
C.) Collabo	ration/Partn	ership Plan	(20 Points N	Aaximum Pe	r Reviewer)
R1:	+ R2:	+ R3:	+ R4:	+ R5:	= Total:
		Average (	Γotal/5) =		
D.) Work P	lan (20 Poir	ıts Maximun	n Per Review	ver)	
R1:	+ R2:	+ R3:	+ R4:	+ R5:	= Total:
		Average (	Γotal/5) =		·



E.) Dissemination Plan (15 Points Maximum Per Reviewer)

F.) Evaluation Plan (30 Points Maximum Per Reviewer)

G.) Budget (25 Points Maximum Per Reviewer)

H.) Project Support (10 Points Maximum Per Reviewer)



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Research Institute for Studies in Education, Iowa State University

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Submitted and Funded Multimedia Curriculum Projects by Educational Level

#### Summary of the Funded Multimedia Curriculum Projects

Des Moines Area Community College G.E.D. - The Next Generation (\$192,740)

This project will result in the development of curricula and a support system for delivering high school equivalency and career planning to students using both the ICN and the World Wide Web. The project partners include the Des Moines Workforce Development Center and 33 LEAs: Adel-Desoto-Minburn, Ames, Ankeny, Ballard, Bondurant-Farrar, Carlisle, Collins-Maxwell, Colo-Nesco, Dallas Center-Grimes, Des Moines, Earlham, Indianola, Interstate 35, Johnston, Knoxville, Melcher-Dallas, Nevada, North Polk, Norwalk, PCM, Pella, Perry, Pleasantville, Saydel, Southeast Polk, Southeast Warren, Stuart-Menlo, Urbandale, Van Meter, Waukee, West Des Moines, Winterset, and Woodward-Granger.

Northern Trails AEA Mathematics Project (\$192,740)

This project will result in the development of "performance-based, technology-rich" interactive products in mathematics. The project is geared toward middle school grades (i.e. 6-7-8). The project partners include University of Northern Iowa, North Central Regional Educational Laboratory, and the Exemplars Program located in Vermont, as well as 10 LEAs: Charles City, Clear Lake, Lake Mills, St. Ansgar Middle School, plus five additional school districts.

Kirkwood Community College Careers: Pathways for Success (\$176,479)

This project would result in the development of a foundations course, "Career: Pathways for Success," for a proposed Career Academy. This would be geared for high school students and include components involving workplace skills, technology, teamwork, problem solving, and selfmanagement. The course would utilize the ICN. The project partners include Grant Wood AEA and five LEAs: Cedar Rapids, College Community, HLV, Linn-Mar, and Marion Independent School District.



6/7/96

Iowa State University
Iowa Chemistry Education Alliance
(\$178,670)

The Alliance project proposes to develop concept-oriented units for chemistry to be used by high school teachers. Teachers and students would collaborate with others around the state. The project would utilize the ICN as well as other technologies. The project partners include Heartland AEA and several ISU departments as well as four LEAs: Ames, Des Moines, Perry, and West Des Moines Dowling.

#### Dubuque Community Schools Environmental Science Curriculum (\$192,740)

The project centers around the development of instructional units in environmental science. The units will utilize a variety of technologies and will be developed by student and teacher teams. Additionally, the goals include both involving the local communities in the development and a curriculum integration component. Both students and teachers will gain understanding in both content and the design process. The project partners include John Deere, Times-Mirror, the Finley Hospital, and three LEAs: Dubuque, Dubuque Metropolitan Schools, and Western Dubuque.

# Area Education Agency 6 Instructional Unit Development (\$190, 119)

The project involves the development, testing, publishing, and dissemination of 10 instructional units which are adapted from existing curricula. The adapted units will involve a variety of technologies, including the ICN, and will be geared toward elementary, middle, and high school students. The units are drawn from 145 project submissions from Area 6 teachers and will be developed by teacher-led teams. The project partners include University of Northern Iowa, Iowa Valley Community College, various local businesses, and 16 LEAs: Ackley-Geneva, Alden, BCLUW, BGM, East Marshall, Eldora-New Providence, Gladbrood, GMG, Grinnel-Newburg, Hubbard-Radcliffe, Iowa Falls, Marshalltown, Montezuma, South Tama, Wellsburg-Steamboat Rock, and West Marshall.



6/6/96

# Appendix B:

# Exemplary Applications

Chart: Submitted and Funded Exemplary Applications

by Education Level

Chart: Submitted and Funded Exemplary Applications

by Subject Area

Chart: Submitted and Funded Exemplary Applications by Media Used

Showcase Announcement

Table: Information About Showcases on Exemplary Educational Technology Applications

Showcase on Technology in Iowa Schools:

Description of Nineteen Winners



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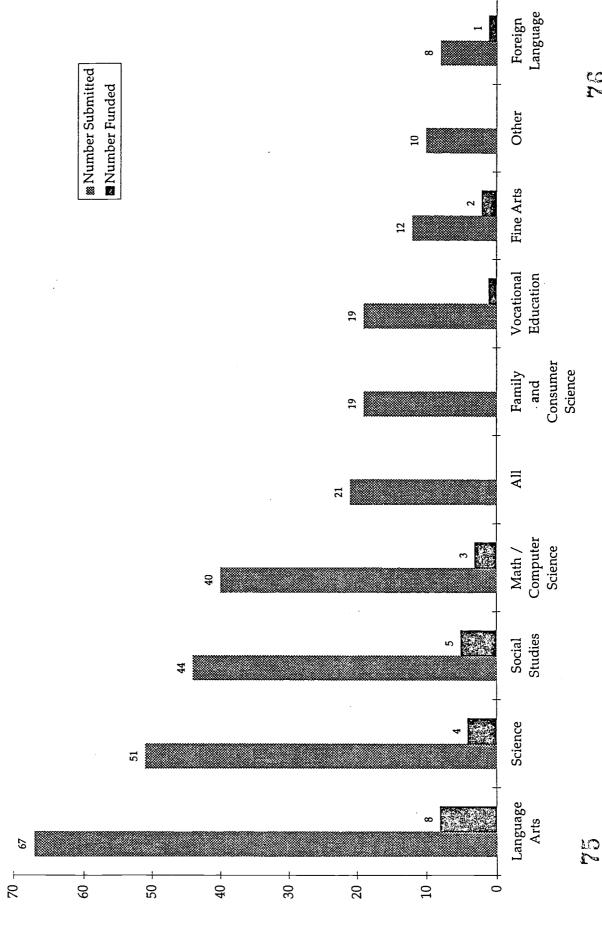
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Number Funded



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# Please post this flyer!!



# Announcing



# Showcase on Educational Technology award winners offer a series of sharing sessions on the ICN

The following dates and ICN sites have been reserved for origination.

February 26, 1996	March 11, 1996	April 8, 1996
4 - 5 pm	4 - 5 pm	4 - 5 pm
Norwalk at Des Moines	Davenport at Bettendorf	Center point at Cedar Falls
Public Health	Clinton at Bettendorf	Central City at Cedar Falls
Ankeny	Grundy Center	Alburnett at Cedar Falls
Garner	Gilbertville at Waterloo	Humeston at Chariton
Galva at Ida Grove		Tama
Battle Creek at Ida Grove		Durant at Bettendorf
Dubuque at Peosta		

Join your colleagues as they share their technology projects on the ICN.

If you would like to attend the sharing sessions, the following sites have been requested:

February 26, 1996	March 11, 1996	April 8, 1996
Keokuk	Calmar	Elkader
Elkader	Charles City	Charles City
Charles City	Webster City	Rock Rapids
Rock Rapids	Marshalltown 2	Marshalltown 2
Marshalltown 2	Maquoketa	Estherville
Estherville	Allison	Allison
Allison	Marion HS	Marion HS .
		Muscatine
Fort Dodge AEA	·	Fort Dodge AEA
Newton	Newton	Newton
Sioux City AEA	Sioux City AEA	Sioux City AEA
Council Bluffs 2	Clarinda	Keokuk
Creston	Fairfield	Creston
Bettendorf 2	Wapello	Wapello
	,	Council Bluffs 2
•		Ottumwa 1

OR call your local scheduler for additional sites.

Please post!! Please post!! Please post!!



plications	Approximate Number of Attendees Number of Presenters	9	12	4	. 9
Information About Showcases on Exemplary Educational Technology Applications	Approximate Number of Attendees	15	200	20	35
cases on Exemplary Edu	Approximate Number of Sites	19	П	. 16	22
ormation About Show	Delivery Method	ICN	On-Site	NOI	ICN
Jul	Showcase Date	2/26/96	2/29/96	3/11/96	4/8/96

# Underserved Populations - Showcase Winners School Districts and ICN Classroom Locations

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		!	Limited English		County		District	
	Chapter 1	Minority	Proficiency	Special	Poverty	Rural	Enrollment	ICN
School	Concentration	Enrollment(1)	(>25 students)	Education(2)	Rate(3)	County(4)	009>	Classroom
Alburnett Community								
Battle Creek				5		100	>	
Elementary School	×			25		IXI	<	
Center Point-Urbana	·							
Elementary and								
Middle School								
Central City					٠		;	
Community School							×	
District								
Clinton		M1		53				×
High School		1141		3				
Duranit						R2		
High School								
Galva-Holstein						R1		
Middle School								
Garner-Hayfield				23		R2		×
Community Schools								
Grundy Center				S2		R2		×
High School								

 $(1) Minority\ Enrollment: M1=6.6\%\ and > 250\ students;\ M2=>6.6\%\ but < 250\ students;\ M3=>250\ students\ but\ less\ than\ 6.6\%$ (2)Special Education Enrollment:S1=>10% and >250 students;S2=>10% but <250 students;S3=>250 students but <10% (3)Percentage of 17-year-olds and younger living in poverty: P1=>25%;P2=20.1%-15%;P3=15.1%-20%

(4)Population: R1=<2,500;R2=2,500-19,999

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Underserved Populations - Showcase Winners School Districts and ICN Classroom Locations

			Limited English		County		District	
	Chapter 1	Minority	Proficiency	Special	Poverty	Rural	Enrollment	ICN
School	on	Eni	(>25 students)	Education(2)	Rate(3)	County(4)	009>	Classroom
Hempstead High School	×	M3	×	S1				
J.B. Young Intermediate School		M1	×	S1	P3			
Mormon Trail Elementary School	×			S2	P1	R2		×
Norwalk Community High School								
Parkview Middle School				53	·			
South Tama County Intermediate		M1	×	S2		R2		×

(1) Minority Enrollment: M1=6.6% and >250 students; M2=>6.6% but <250 students; M3=>250 students but less than 6.6%

(2)Special Education Enrollment::S1=>10% and >250 students;S2=>10% but <250 students;S3=>250 students but <10%

(3)Percentage of 17-year-olds and younger living in poverty: P1=>25%;P2=20.1%-15%;P3=15.1%-20%

(4) Population: R1=<2,500; R2=2,500-19,999

# Showcase on Technology in Iowa Schools

In response to a call from the Iowa Educational Technology Training Institute for uses of technology in Iowa schools, close to 300 surveys were returned showing a wide range of uses. Winners were chosen, based on innovative uses of technology in the classroom. After two judging phases, nineteen winners (4 higher education and 15 K-12 schools) were awarded \$1000 each to further enhance their projects. The Institute has plans to develop the responses to the survey into a database to be made available both in print and on the World Wide Web.

# Photos from the Technology Showcase

- Mormon Trail Elementary School
- South Tama County Intermediate
- Galva-Holstein Middle School
- Garner-Hayfield Community Schools
- Battle Creek Elementary School
- Parkview Middle School
- J. B. Young Intermediate School
- Immaculate Conception/St. Joseph School
- Durant High School
- Norwalk Community High School
- Clinton High School
- Grundy Center High School
- Center Point-Urbana Elementary School and Center Point-Urbana Middle School
- Alburnett Community School District and Central City Community School District
- Hempstead High School
- North Iowa Area Community College
- Buena Vista University
- Hawkeye Community College
- Kirkwood Community College

Mormon Trail Elementary School 403 South Front Street Humeston, IA 50123 (515) 877-2521

Contact Person: Martha Shanks

Media Specialist: Pati Lindsey, Celia Davis

Teacher: Karen Danner, Diana Trammel, Brian Summy, Kimberly Roberts, Sharon Day, Debra Dyer

Principal: Sue Brock

Classroom Applications/Project Type: Use of ICN, Use of CD-ROM disc, Use of laser disc, Development of multimedia, Use of Internet or other on-line service, Use of computer software, Collaborative project with business/industry

Recommended Subject Area: Social Studies

Grade Level/Audience: Grades 4-6



Project Description: Roots to Wings: an Information Resource Center uses the ICN (to talk with experts in Mormon history), CD-ROM (as a research source), laser disc (for research and development of multimedia presentations), Internet/on-line services (to participate in National Geographic's "Hello" project where students are introduced to online capabilities with other students in the United States), computer software (ClarisWorks and Hyperstudio used to create hypermedia presentations), development of multimedia (videotapes of projects are developed to summarize the project) and a collaborative project in the community (to strengthen ties within the community through the Information Resource Center).

South Tama County Intermediate 215 West 9th Street Tama, IA 52339 (515) 484-4826

Contact person: Kathy Robbins

Media Specialist: Jan Arends

Teacher: Ginny Elliot

Classroom Application/Project Type: Use of Internet or other on-line service

Recommended Subject Area: Science/Social Studies

Grade Level/Audience: Grade 3

Project Description: Using the Internet to Teach Thematic Units utilizes the Internet for information, support materials, and resource people. Mathmagic challenged students to partner with students in Hong Kong. Students have been involved in migration studies, an enthnobotany monitoring project, e-mail with Hubbell Telescope engineer and shuttle Mission specialist, and corresponding with others online. The plan is to share results of thematic units with others on the ICN leading to greater collaboration with others in Iowa.

Galva-Holstein Middle School Noll Street Galva, IA 51020 (712) 282-4213

Contact Person: Jim Christensen

Classroom Application/Project Type: Use of ICN, Use of CD-ROM disc, Development of multimedia, Use of Internet or other on-line service, Use of computer software, Collaborative project with business/industry

Recommended Subject Area: Interdisciplinary - Science, Math, Social Studies, Language Arts and Fine Arts

Grade Level/Audience: Grade 6

Project Description: Interactive Mars Base Project involved 555 6th grade students from eight area schools and NASA engineers in designing and building model Mars bases and sharing their products with others using



the ICN. Through the ICN capabilities, students from each school attended an interactive satellite teleconference in which the NASA engineers discussed the location of Mars, how to travel to Mars, the characteristics of Mars and essential elements of Mars base construction. Students returned to their schools to begin teamwork on building Mars base models. They communicated with each other and the engineers through e-mail and speakerphone. The students shared their projects with each other through the ICN. The project in ongoing with more teachers and students as well as commitment from NASA.

Battle Creek Elementary School 401 Maple Street Battle Creek, IA 51006 (712)365-4365

Contact Person: Kim Christensen

Teacher: Kim Christensen

Classroom Application/Project Type: Development of multimedia, Use of computer software, Other

uses of technology: digital camera

Recommended Subject Area: Reading/Language Arts

Grade Level/Audience: Grade 4 (Grades 2-12 also)

**Project Description:** Charlotte's Web Hyperstudio Student Presentations involved students creating a "book report/computer presentation" using Hyperstudio. Students took pictures and recorded their voice onto the computer. They also drew their own versions of scenes and characters from Charlotte's Web and added clip art to their stacks. At the end of the assignment, students shared their work with parents and guests from the community. The broader aspect of the project includes music, math, and science.

Garner-Hayfield Community Schools 605 Lyons, P.O. Box 449 Garner, IA 50438 (515)923-2632

Contact Person: Denise Linneman

Media Specialist: Denise Linneman

Teacher: Susan Brink

Classroom Application/Project Type: Use of multimedia Project Description: Periscope Project is a student generated program for cable television. Students choose a topic for investigation, research the topic using computer software at the technology station in the classroom, contact persons to be guests on their program, and tape the interviews from a phone call, ICN room or on-site taping. On the day of taping, students go to the TV studio at the AEA and take on jobs as the production crew and interviewers. Each program contains the actual interviews with news breaks which are researched, written, and delivered by students with public service announcements developed by seventh graders. The program goes out on cable to an audience of 30,000 people in the area. The tapes are on reserve at the AEA.



Parkview Middle School 105 NW Pleasant Street Ankeny, IA 50021 (515) 965-9640

Contact Person: Linda Smith, Bill Devitt

Media Specialist: Lilith Dorr

Teacher: Linda Smith, Bill Devitt, Janet Metzger

Principal: Danielle Chappell

Classroom Application/Project Type: Use of computer software

Recommended Subject Area: Reading

Grade Level/Audience: Grade 6, reading teachers

**Project Description:** Literature-Based Reading Program uses the network version of Accelerated Reader Computerized Reading Program as an alternative to writing traditional book reports. This program focuses on developing strategic, motivated, life-long readers and learners. Gifted and talented students are challenged to add components to the program for books not in the program. Sixth grade students develop a one-page newspaper using work processing or desktop publishing software reflecting a book they have read.

J. B. Young Intermediate School 1709 Harrison Street Davenport, IA 52803 (319) 326-4432

Contact Person: Rex Hutchinson

Media Specialist: Nancy Dehner

Teacher: Katherine Searle

Principal: Rex Hutchinson

Classroom Application/Project Type: Use of CD-ROM disc, Development of multimedia, Use of Internet or other on-line service, Use of computer software, Use of multimedia

Recommended Subject Area: English

Grade Level/Audience: Grades 6-8

Project Description: Student-Generated School Newspaper: What's Up In JaguarTown? is produced by 8th grade study hall students using ClarisWorks, Hyperstudio and Microsoft Works. They have ordered a 5-pk. Pagemaker to begin putting the newspaper together using three computers (some is personal property) and a Quick Take Camera and color scanner. Two teachers plan to create a home page to showcase student work and open dialogue with other students around the world.



Immaculate Conception/St. Joseph School 311 16th Avenue Gilbertville, IA 50634 (319) 296-1089

Contact Person: Ruth Palmer

Media Specialist: Ruth Palmer

Teacher: Ruth Palmer, Gayle Allen (ISU)

Classroom Application/Project Type: Use of Internet or other on-line service

Recommended Subject Area: Language Arts/Preservice Teacher Education

Grade Level/Audience: Middle School, College

Project Description: Writing and Reading Using E-mail and ICN Exchanges connects long distance "partners" of paired 8th graders with ISU preservice education students. At an initial ICN "meeting", the students exchange photos and snail mail introductions. Throughout the semester, students send at least ten e-mail messages using the America On Line gateway to the Internet. At the end of the semester, students have a closing "good-bye" over the ICN. The project gives 8th grade language arts students a real audience for writing and reading while preservice students gain experience working with real students and practicing teachers.

Durant High School 408 7th Street Durant, IA 52747 (319) 785-4431

Contact Person: Steve Reinert

Media Specialist: Wendy Brooks

Teacher: Deb Schoelerman

Classroom Application/Project Type: Use of ICN, Use of Internet or other on-line service, Use of

computer software, Other uses of technology: videophone

Recommended Subject Area: Spanish

Grade Level/Audience: Grades 9-12

Project Description: Citizen of the World involves Spanish students with a sister school, ESFER (Escuela San Felipe El Real) in Chihuahua, Mexico. First and second year Spanish students exchange letters and holiday cards, written on computer, with pen pals several times a year. Using a computer, the fourth year students publish a newspaper which teaches students from ESFER about the Iowa school. Students communicate with students in Mexico using the videophone to practice their Spanish and learn more about each other. Fourth year Spanish students produce and edit a videotape of the Durant community and the school to send to ESFER as well as editing their trip to Chilhuahua in 1995. Third and fourth year students use the



Norwalk Community High School 1201 North Avenue Norwalk, IA 50211 (515) 981-4201

Contact Person: Tom Fish

Media Specialist: Kelly Fishbach

Teacher: Pam Brown, Sara Coleman, Kelly Fishbach

**Principal:** Tom Fish

Classroom Application/Project Type: Use of CD-ROM disc, Use of laser disc, Development of multimedia, Use of internet or other on-line service, Use of computer software, Use of multimedia

Recommended Subject Area: Biology

Grade Level/Audience: Grade 10

**Project Description:** Hypermedia Research Project on DNA and Genetics involves sophomore biology students in cooperative groups to research and develop their projects. The project culminated in a hypermedia showcase night with 37 completed projects for the community to see and experience.

Clinton High School 817 8th Ave. South Clinton, IA 52732 (319) 243-7540

Contact Person: Raymond Smith

Teacher: Raymond Smith

Classroom Application/ Project Type: Use of Internet or other on-line service

Recommended Subject Area: Computer Science

Grade Level/Audience: Grades 9-12

Project Description: Computer Curriculum with Information Accessing Skills Objectives was designed to give students skills necessary to collect information from the Internet, build a knowledge base, process the information, and create a product (electronic slide show, Internet home page, newsletter, or multimedia hyperstudio presentation) to share knowledge gained with others.

Grundy Center High School



1006 M Avenue Grundy Center, IA 50638 (319) 824-5449

Contact Person: Kathy Hosch, Ron Swanson

Media Specialist: Don Osterhaus

Teacher: Kathy Hosch, Ron Swanson

Classroom Application/Project Type: Use of computer software, collaborative project with

business/industry

Recommended Subject Area: Language Arts

Grade Level/Audience: Grades 7-12

**Project Description:** Media Now Class Production of Commercials using Power Point presentation software to produce advertisements and other graphics for the video production. Students produce commercials interviewing business people in the area as well as commercials for underclassmen on elective classes available at the school. The project involves video editing, development of graphics using Power Point presentation software, and Quick Take.

Center Point-Urbana Elementary School and Center Point-Urbana Middle School P. O. Box 296 Center Point, IA 50613 (319) 849-1102

Contact Person: Leandra Sunseri

Media Specialist: Leandra Sunseri, Judy McClure

Teacher: Leandra Sunseri, Judy McClure, Candi Kilburg, Cheryl Hettinger

Classroom Application/Project Type: Development of multimedia, Use of other non-print materials, Use of Internet or other on-line service, Use of multimedia, Other uses of technology: digital camera, flexcam, flatbed color scanner

Recommended subject area: Science

Grade Level/Audience: Grades 4-5

Project Description: KIDS (Kids Doing Science) is a hands-on, activity-based science curriculum which replaces textbooks. Students learn science through experiments using kits (developed by area teachers) with lesson plans and equipment for each unit. A grant from Roy J. Carver Charitable Trust permitted them to incorporate technology. Students document their experiments and share their results with each other, teachers, and parents through the use of computers and special input devices: a digital camera, flatbed color scanner, and a Videolabs flexcam.



Alburnett Community School District P. O. Box 188 Alburnett, IA 52202 (319) 842-2261

Central City Community School District 400 Barber Street Central City, IA 52214 (319) 438-6182

Contact Person: Tom Hoover (Central City)

Media Specialist: Deb Roggow (Alburnett), Michelle VanRheenen (Central City)

Teacher: Nancy Goodlove, Karen Maas (Central City), Luann Byerly, Jeff Miles, Paula Pearson, Bruce

Mallory (Alburnett)

Classroom Application/Project Type: Use of multimedia

Recommended Subject Area: Social Studies

Grade Level/Audience: Grades 6-12

Project Description: The Electronic Community History (TECH) is a collaborative oral history project involving 5th and 6th graders at Alburnett and Central City. The TECH project will create student-centered, inquiry-based classrooms where teachers and students will conduct historical research using interactive multimedia stations and Internet information resources. Part of the research will include interviewing older community members through personal interviews. The project will provide a framework enabling network-accessible electronic resources. The project will culminate in the creation of community history CD's, videotapes, and booklets created by the students, digitized for storage on WWW and copies of final products donated to libraries in the areas. (project in developmental stage)

Hempstead High School 3715 Pennsylvania Ave. Dubuque, IA 52002-3792 (319) 588-5132

Contact Person: John O'Connell

Media Specialist: Liz Morgan

Teacher: Marlin DeWeerdt

Classroom Application/Project Type: Other uses of technology: linking calculators to computers and

other calculators

Recommended Subject Area: Senior Advanced Math

Grade Level/Audience: Grades 11-12

Project Description: Linking Calculators and Computers to Exchange Data, Equations, Graphs, and



Programs uses graphing calculators connected to a computer based lab (CBL) linked to a probe designed to collect data such as: motion, pH factor, heart rate, sound, temperature, and electrical current. Students work in small groups to set up an experiment and collect the data with the probe and CBL unit. Data is transferred to the calculator for data analysis. Data is transferred back to the computer and students develop a report describing the procedure, data, and results.

North Iowa Area Community College 500 College Drive Mason City, IA 50401 (515) 421-4202

Contact Person: Keith Byman

Teacher: Darris Pratt

Classroom Application/Project Type: Use of ICN, Other uses of technology: lab-based ICN course

Project Description: ICN Electronics Lab-Based Course was offered to 14 teachers and 66 high school students. The course utilized a three-pronged approach to learning: initially students solved problems using hand calculations as new topics were presented; then students used Electronics Workbench (EBW) to simulate circuits and verify hand calculations; and finally students used real components and test equipment to build and test original calculations. NIACC is currently working with other merged areas in the state to offer this same opportunity for other teachers and students.

Buena Vista University College Street Storm Lake, IA 50588 (712) 749-2019

Contact Person: Kenneth Schweller

Teacher: Kenneth Schweller

Classroom Application/Project Type: Simulation and/or virtual reality

Project Description: Online Text Based Virtual Academic Community, "College Town", has been in operation for two years and includes over 600 members. Faculty and students from anywhere in the world can telnet directly to "College Town" to participate in academic activities such as: online seminars, small classes, guest lectures, poetry readings, theater productions and collaborative research done online in "real time". This semester, students in the course "Exploring Cyberspace" will work collaboratively with others from Iowa, California, Wyoming, Missouri, and even Switzerland, using resources such as an active gopher and web-based library in "College Town".

Hawkeye Community College 1501 E. Orange Road, P. O. Box 8015 Waterloo, IA 50704-8015 (319) 296-4017



Contact Person: Roger Rezabek

Teacher: Cherie Post

Classroom Application/Project Type: Use of ICN

Project Description: Taking ICN Students to the Library was a demonstration of how the ICN classroom can go anywhere on campus - a science lab, the library, the cafeteria, or the President's office. Using portable video cameras and rerouting the ICN signal, the instructor was able to bring all her students to the library on three class sessions. The instructor even input a computer periodical search directed by a student at a remote site. Videotapes of the sessions are available upon request.

Kirkwood Community College 6301 Kirkwood Blvd., S.W. Cedar Rapids, IA 52406 (319) 398-5411 ext. 5829

Contact Person: Richard Edwards

Teacher: Richard Edwards

Classroom Application/Project Type: Use of multimedia Project Description: Multimedia English Composition II Course uses software such as Microsoft Word 6.0, Power Point and CD-ROM's rather than a formal multimedia authoring software package. Students work in teams in a collaborative multimedia classroom to construct projects: a written critical analysis of a poem with non-textual annotation (multimedia); research project investigating a year in American history with multimedia elaborations; and a persuasive presentation using Power Point presentation software. Students learn how to access information, clip pieces together and present or compose using multimedia.



# Appendix C:

# Regional Partnerships

Summary of Original Regional Partnership Plans
Summary of Regional Partnership
Accomplishments
Summary of Regional Mini-Grants
Summary of Regional Coordinators Surveys
Summary of Regional Coordinators Surveys
Categorized Comments
Regional Evaluation Instructions
Staff Development Participant Survey
Staff Development Course Evaluation 2/13
Staff Development Course Evaluation 2/15
Interactive Television Workshop Evaluation
Summary
Staff Development Participant Survey



Summary of Original Regional Partnership Plans

	ICN Classroom		,		Č
Region	Equipment	Internet Access	Staff Development	Technical Support	Other
Keystone		Regional router and			
AEA 1		server at AEA, mini-			
	grants for local router	grants for local router		-	
	Support 8 Phase III sites	packages			
rails			ICN, Internet and		ICN classroom
AEA 2			Room Manager training Consultations	Consultations	demonstrations,
	Support 14 Phase III sites	Router, connect costs, PVC costs	as well as hands-on workshops	l, Internet looting	community awareness programs
Lakeland		<del>!                                    </del>			
AEA 3		at AEA, domain server,			
		mini-grants to LEAs to		On line help and chattie	
		assist with internet	Mini-grants for schools reports technology	Citi-illie iteip ailu status renorts technology	
	Support 6 Phase III sites implementation		do to training	planning opportunities Evaluation	Evaluation
AEA 4		Regional router and			
		server, support to offset			
		school costs for direct			
	Support 5 Phase III sites or dial-up connection	or dial-up connection			
Arrowhead		Router servers	Training for	Networking support	
AEA 5		CSU/DSU, 800 dial-up   nerworking support		specialist, Maintenance	
	Support 5 Phase III sites line	line	specialist	contracts	
AEA 6		Establish hub, provide			
	Support 14 Phase III	routers and connect			
		fees			
AEA 7			Staff development		Technology teaching
	Support 5 Phase III sites FOTS room at AEA	FOTS room at AEA	activities		classroom at AEA
Mississippi Bend			8 3-day ICN classroom		
AEA 9	Support 12 Phase III	Offset school district	workshops, 10 Internet training sessions		
	Sitts	מוכבו בסומוכבו בספים	9		

Other  Evaluation  Curriculum  development projects  Evaluation	Technical Support	Staff Development Internet, ICN, Room Manager, HTML, and help desk training training Trouble shooting training Train leaders to work with colleagues in ICN and Internet usage	Internet Access WAN server at AEA, offset school district direct and dial-up connect costs Offset school district direct and dial-up connect costs Router, CSU/DSU at AEA, offset school district connect costs Router, csuchool district AEA, offset school district connect costs Offset school district connect costs	ICN Classroom	Region Grant Wood AEA 10 Western Hills AEA 12 Loess Hills AEA 13 AEA 14 Southern Prairie AEA 15 AEA 15
•			חוופבו שרזוחח מושרווח		7777
_			offset school district		<b>AEA</b> 16
			Router, server at AEA,		Great River
Evaluation		and Internet usage	connect costs	sites	
: •		with colleagues in ICN	Offset school district	Support 15 Phase III	AEA 15
		Train leaders to work	:		uthern Prairie
development projects		training		Support 3 Phase III sites	AEA 14
Curriculum		Trouble shooting		•	reen Valley
			district connect costs	sites	
			AEA, offset school	Support 32 Phase III	AEA 13
			Router, CSU/DSU at		oess Hills
	-		connect costs	Support 7 Phase III sites	
			direct and dial-up		<b>AEA</b> 12
			Offset school district		estern Hills
	•		costs	sites	
			Offset school district	Support 49 Phase III	<b>AEA</b> 11
Evaluation		help desk training	connect costs	sites	
,		Manager, HTML, and	direct and dial-up	Support 38 Phase III	
	•	Internet, ICN, Room	offset school district		<b>AEA</b> 10
			WAN server at AEA,		rant Wood
Other	Technical Support	Staff Development	Internet Access	Equipment	Region
,				ICN Classroom	

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	Summary of Reg	Summary of Regional Partnership Accomplishments from October, 1995 to May, 1996	plishments from Octob	er, 1995 to May, 1996	
Region	ICN Classroom Equipment	Internet Access	Staff Development	Technical Support	Other
Keystone AEA 1		Router and server in place at AEA, 20	•		
		schools received		Hired network	
		support for routers, 3		specialist, assisting schools with	
	Supported 6 Phase III	advanced switching		configuring, installing	-
	sites	devices		and maintenance	
Northern Trails					
AEA 2		Router and PVC in			
		place at AEA, LANs			
		will be installed in area			
	4 schools applied for	er, 5			
	assistance with ICN	cted	Internet and room		Some ICN
	classroom equipment	through AEA	manager classes offered Help desk established	Help desk established	demonstrations
Lakeland		AEA equipment			
AEA 3	Supported 6 Phase III	purchased, server and		Software purchased to	
	classrooms, 3 are up	backbone expenses		provide technical	
	and running	covered		assistance	Awarded 7 mini-grants
AEA 4		1 school received			
	2 of 5 sites received	funding for direct			
	funding for Phase III	access, AEA equipment   Some training on how	Some training on how		
	classrooms	purchased	to use Internet		
Arrowhead			Network support		
AEA 5	•		specialist and CISCO		
			router training, internet	,	
	Supported 5 Phase III	19 schools received	training, technology Contracted with each	Contracted with each school district for LAN	
	September	connects	options	analysis	
		A			

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Summary of Regional Partnership Accomplishments from October. 1996 to May, 1996 (continued)

	Summary of Regional	Summary of Regional Partnership Accomplishments from October, 1996 to May, 1996 (continued)	ments from October, 199	o to May, 1996 (continue	ea)
	ICN Classroom				
Region	Equipment	Internet Access	Staff Development	Technical Support	Other
AEA 6		11 will have LANs/WANs in place by Fall evaluating	ICN used for Internet	·	
	7 schools connected to ICN	ıţ		Hiring network specialist	
AEA 7					Develoning classroom
		putchased router, 4 high schools connect			at AEA dedicated to
Mississippi Bend			Informat training	Media advisor	9
AEA 9	1 school connected to ICN, 2 more scheduled		raining	meetings with area schools	Program brought in from another AEA
Grant Wood					
AEA 10		Purchased and installed			
		server at AEA, 8			
			Telecommunications		
	6 schools received	support for costs, 18	training for school		
	support for ICN	receiving support for	boards and technology		
	classrooms, 2 connected	direct connect costs	coordinators		
AEA 11	3 schools have	5 schools have	8 ICN training sessions,		
	ort for	pport for	2 sessions for AEA staff		
	ICN classrooms	direct access	only		
Western Hills AEA		Network installed at			
12		AEA, 28 sites direct			Curriculum
		connection, 2 dial-up	Participated with other		development project
		connections	AEAs in inservice		presented over ICN

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	Summary of Kegional	Summary of Regional Partnership Accomplishments from October, 1995 to May, 1996 (continued)	ments from October, 1999	o to May, 1990 (continue	eu,
	ICN Classroom				
Region	Equipment	Internet Access	Staff Development	Technical Support	Other
Loess Hills AEA 13		Provided support for connection costs, 8 schools hooked up, 20 more scheduled for summer and fall, 15 have equipment and waiting for ICN connection			
Green Valley AEA 14			Basic Internet use book developed and distributed		28 mini-grants for curriculum development projects have been funded, 5 schools have completed projects
Southern Prairie AEA 15	10 planning for ICN connection, asking for equipment specifications	4 schools received support for dial-up access, 20 working on direct connection			
Great River AEA 16					



# Summary of Regional Mini-Grants

- 1. Clearfield \$613 To amass a comprehensive list of K-12 science Internet sites complete with lesson plans. The results will be disseminated via web page and paper.
- 2. Bedford \$1176 To create a syllabus for a 12 week Introduction to Internet course for high school students.
- 3. Stanton \$750 To write an elementary computer curriculum for students K-6 and elementary staffs.
- 4. Diagonal \$618 To partially fund an inservice on Power Point and produce eight replicable presentations.
- 5. Mormon Trail \$860 To coordinate an on-line Iowa history user group that specializes in the Mormon Trail. Will link at least three districts via e-mail. Will disseminate the collective results via a web page.
- 6. East Union \$1117 To research several areas of elementary American history, make a comprehensive list of sites, and write and disseminate lessons plans to dovetail into the area-wide curriculum writing project.
- 7. Corning \$1192 Using three sites K-12, will develop a bibliography of Iowa schools participating in the Hubble Space Telescope project (NASA), and provide description of how the project can be used in other classrooms.
- 8. Villisca \$968 Search of sites on current events with lesson plans and dissemination.
- 9. Red Oak \$698 Local history research with addresses and directions on how to replicate; \$537 Unit on inventors and inventions complete with sites and lesson plans; \$457 Music sites and plans; \$387- Sites and plans for the study of planets.
- 10. Clarke \$2096 To research several (6-7) areas of K-12 curriculum, make a comprehensive list of sites, and write and disseminate lesson plans to dovetail into the area-wide curriculum writing project; \$945 To research topics of rainforest, medieval studies, volcanoes; \$810 To research and develop lesson plans and programs for use of the calculator-based labs, and to disseminate same via paper and home page; \$135 To develop a lesson plan and usable web sites for American government to track presidential candidates' position on various political issues.
- 11. Lenox \$1007 Will identify K-6 literature sites, listings of literature, and design lesson plans/activities for use in a literature based curriculum. Information will be disseminated via web page and paper.
- 12. Central Decatur \$340 Identify and annotate sites which contain statistical data for 7-12 and make at least four lesson plans to accompany them; \$420 List of art sites with a summary of the material and at least two projects for student analysis; \$420 Will create a bibliography of resources and student activities for biotechnology, especially in the application of foods and human health.
- 13. Greenfield \$1127 Compile sites regarding travel in Mexico to simulate travel there and dissemination. Compile a list of sites for the study of the food pyramid and develop a week's diet that demonstrates their knowledge.
- 14. St. Malachy Identify and share the process of doing educational research on the Internet. A list of search sites and a document that will outline the process and techniques used to search the web on a particular educational topic will be the end result.
- 15. Lamoni \$958 Develop a survey to poll community and staff as to what the uses of Internet are, compile the survey, make a technology plan to incorporate into curriculum, develop a usage policy and disseminate all the preceding.



- 16. Mt. Ayr \$839 Complete a multi-media social studies station and compile a syllabus for a multimedia class; \$500 Complete a syllabus and lessons for a cross-curricular multimeda lab.
- 17. Creston \$902 Research language arts sites complete with lesson plans and disseminate via paper and home page; \$902 Research the topics of Civil War and oceans for upper elementary. Sites will be submitted with lesson plans for use; \$519 Research and disseminate MOC sites.
- 18. Murry \$800 Identify and disseminate sites that contain curriculum and lesson plans for K-6 math.
- 19. Bridgewater \$406 Space unit will compile a list of sites on elementary space with annotations and a lesson plan on how to integrate the sites into curriculum; \$406 Weather unit will compile a list of sites on elementary weather with annotations and a lesson plan on how to integrate the sites into curriculum.
- 20 Bedford \$975 Handbook for high school students that will explain how to use the Internet for researching projects and papers.
- 21. Mormon Trail \$775 Foreign language Develop a list of sites for use by French and Spanish teachers to simulate or actually prepare for a trip abroad.
- 22. Clearfield \$613 A follow-up to the original grant. To amass a comprehensive list of 3-6 science Internet sites complete with lesson plans. The results will be disseminated via web page and paper.
- 23. East Union \$520 Annotated listing of World Wide Web sites for Elementary Keyboarding for grades 3-6 will be created. This will provide a comprehensive data bank of current trends and teaching strategies.
- 24. Murry \$760 Identify sites that deal with ideas and curriculum on implementing technology into the K-12 classroom. Results will be disseminated in the form of sites and conclusions.
- 25. Lenox \$950 Facilitate series of science meetings for K-3 classroom teachers to share ideas and strategies to be run in conjunction with the area-wide curriculum writing. Includes line time for 8 sites x 4 sessions (\$320), teacher prep and facilitation (\$480), and dissemination of found materials (\$150).
- 26. Mt. Ayr \$540 Sites for German and Spanish with annotations and lesson plans.
- 27. Central Decatur \$1200 Creation of a teacher guide on teaching students how to use HyperStudio/Internet to produce projects. Includes lesson plans, forms and assessment information, as well as curricular integration.



# SUMMARY OF REGIONAL COORDINATORS SURVEY Conducted in May, 1996

# How it is going

- · Going very well. Smoothly. Schools are very appreciative. This has been a catalyst for getting things started.
- Very well. We are one of two regions in the state that are on the top of the list for schools to get hooked up. There is a lot of interest and excitement, and a little frustration with the delays. Some get aggravated with the Internet. Now they are pleased with the service they get. It has been encouraging because now we are trying to dovetail what we are doing here in the region with Star Schools activities, RTC activities, and the state Department of Education technology audits. Schools are developing technology plans. We have scheduled workshops this summer to help schools put their technology plans in order. Right now, I feel pretty good about what is going on.
- We are right where we should be. We underestimated the amount of time needed to get things in place. That has been a little disappointing.
- ICN classroom use is higher than we expected. Internet use has gone up. All public schools now have some type of Internet presence. Some are seeking district connections. It is going as well as can be expected.
- It has so far exceeded any expectations that I had that I am almost dumbfounded. When the schools are putting \$20,000 of their own money in and a person just to get \$1,700, we know they really want the data side. They want students to have that capability and they are willing to put up the money and time to do it. Star Schools is the carrot. Without that component, it would not have happened or it would have happened much more slowly, like maybe 8 years from now. Maybe in a decade instead of two years. The schools are putting in 80% of the dollars. We had the carrot at the right time. The kids will have access they never have had before. It has worked out well.
- Very well. It will be very effective when all the sites are built out. It will be easier through the colleges and AEAs where some are coming up each year. It allows concentrated staff development. Technical support has been good. We had room manager training for those who will help the teachers and be involve in troubleshooting. There is not 100% participation, but it has gone very well.
- Given the discombobulation of the schedule, things are going fine.
- Very well received. Wish we had more schools with labs so we could offer more training. The biggest hindrance is the labs not there to do it.
- Very well. We are probably one of the better organized regions. Not many schools are hooked up on the
  video side, but we are helping with the Internet side. The RTC is working well. There is a lot of interest in
  the schools.
- Very well. Well received in the schools. Participation in ICN training is not as high as we would like. May
  be due to the limited number of classrooms. That will change over the next year.
- Great. The infrastructure is in place. Without it the schools would not have the opportunity to find out what
  Internet is. There is a lot of staff development on the ICN. We have saved time with having meetings over the
  ICN.
- Good. There is real enthusiasm. School boards have moved to put money into Internet and ICN technology.
- Very well. Lots of enthusiasm. People are learning hands-on as opposed to being a passive audience. They
  have ownership that they didn't have the first time.
- I feel good about it. When we began, it seemed like an insurmountable problems. Two things helped. One, we surveyed people to find out what people needed and we are now meeting those needs. Two, sometimes grant money drives people apart, but Star Schools has not worked that way. I wish that could happen more often. There is also a demand for connections that didn't exist before.

## Impact on K-12 schools

6/7/96

- Speeding up the process of them getting connections and using the Internet. It is a carrot out there. Keeps information in front of the superintendents. Helps make it happen. Makes them aware. Allows for the organization to move quicker. Now some are looking at hiring staff.
- A lot more talk about sharing. Sharing classes. Talk about need for a common calendar. Greater need with ICN for common calendar and even common schedule. It is healthy, this increased willingness to share.
- Travel. Saves time. AEA is located in one corner of the region, not centrally located. To deliver inservice via the ICN is critical.
- One year ago, about half of the public schools had dial-up Internet accounts. There was some variation in
  how it was used, some were in the hands of administrators and not really shared and others were more
  involved. Now curriculum units are being built and it is being used by students. The spectrum of usage has
  increased.



- It is the incentive for the connection. We are having a lot of training on how to use Internet and how to use information sources, that is a whole side of the information stuff that would not be done otherwise. Lots of staff development in that area.
- The ones that have had the rooms are comfortable. New people are enthused. Can see kinds of things that can happen on it. Not so much class sharing as single event things. Will find all kinds of things to do with the ICN. Peer communication while be enhanced, particularly during the winter months. Frees up time. Customized, on-demand staff development possible. A great boon to our schools. Intangibles like time that they don't spend driving can now be spent in two hours of creative teacher time. They can be back home doing things.
- Gave the whole problem of technology greater visibility. Provided a focus to discuss the issues involved. More visibility for technology and particularly for higher-end technology. Lots of people say we have dial-up Internet, but as a result of the ICN, schools are not happy now with dial-up. Most are planning to wire their entire building (LANs, WANs). Will be wiring 4 different district buildings this summer. At end of next school year, four districts will be in a WAN. They serve 65% of the kids in this region.
- Much greater use of the Internet. Teachers can see what it can do for them. How to integrate it into the curriculum. Lots of excitement.
- Gives them an incentive. \$6,000 incentive to move forward. Focus training because we know schools are
  coming on. We are looking at infrastructure this year. The developmental side this fall. Staff development in
  Spring. We sparked it.
- Allowing lots of additional inservice for broader audiences. Saving time and dollar resources for travel. Not
  a lot of district instructional impact. Some instructional activities, but not too heavy yet.
- Saves time for meetings. Facilitated attendance and participation of teachers. Could offer things not otherwise offered.
- Encouraged them to network and think more about policies and getting ready to use the Internet. Funds available so now they are doing it. Wouldn't have done it otherwise for awhile.
- More adept at using the Internet. Producing a product [curriculum] that will outlast the grant. No one can do this themselves. Not just one more project. Schools cannot do it alone.
- People literally beginning to originate things. Learning to use the equipment. Enrichment activities because one can call on others in other places. Makes a difference by helping us understand that we have to integrate technology into what we do. Not an add on or separate piece. Part of the whole. Star Schools helped us move from separateness to integration. Teachers said they needed to see how to implement it into the curriculum, not as a separate technology. The technology gives us a different perspective, different world view. We have heard that now. Pretty powerful stuff. Star Schools touches a lot of people. It didn't just help a few.

# Satisfaction with project management

- Don't even know who they are and what leadership there is. Get information from [IPTV] that is timely and good. Get gracious assistance when we call there. Get money smoothly. There is no leadership for things like asking what does it mean to offer good staff development.
- Hesitate to answer. Things are a little confused here. We had a staff member leave who was working on this and took all the paperwork with her. That has caused some reshuffling.
- Very, very satisfied with service and help.
- Fairly satisfied. Funds were allocated part on enrollments and part on an equal basis for the regions.
   Regardless of size, some costs are the same. Distribution of funds is responsive. IPTV is flexible and helpful.
- Came together as well as could be expected in a state organization to have it work. The first year, I tough, 'Oh, God, it'll never get done.' But I've been really happy with it. It is not an easy job. I couldn't have done any better. I take my hat off to project management. One area that we have not done so well is scheduling. Probably the Achilles heel of the interactive classrooms. Part is technical capability and the other part is trying to appease local control in Iowa. There is a strong feeling that we want local control to drive the 15 regional schedules. A decentralized approach. It is like walking through a field of land mines. Cross regional scheduling is a huge problem now. Providing leadership in this environment is really difficult. Even though the scheduling is being upgraded, it is still not the interface people want. It is like DOS. You can get it done, and it is nicer than before, but it is still really, really awkward. Billing is done for the origination sites. It can't be done at the state level. So you bill and re-bill. Decisions that in retrospect I think were poor. All things considered, I can't think we could have done it any better. And the idea of alliance has happened. It seemed like strange bedfellows at the time, but all in all it has held together. The RTC has helped build collaboration. All the diversity is coming together. Beginning to gel up. Never as fast as you want it. But it is as good as it is going to get in a state so staunchly local control. The department of education (Iowa) needs to step up a bit more. At least they are consolidating efforts in teaching and learning. Helping some understand where department of ed is coming from. Wish UNI would quit doing the teacher training hands-on and do more curriculum stuff. \$3,000 per time out is god awful. Make the information available to train the regional trainers. These are all minor things, not major. By and large, it has turned out really, really well.



- Last year it was a big mess. Very political on the RTCs. Star schools grant many wanted to have proportionate shares. Targeted things needed to be done.
- Wish I knew what that was. Absolutely unfamiliar with whatever work they have done. If they [Partners Council representatives] have reported then I was unaware. Maybe they reported specific issues, but not in context. Have had contact with [people at IPTV] and am very pleased with them.
- Hadn't thought about it. Pretty open-ended. They have been there when we had requests.
- Eight on a scale of one to ten. Think they could have been a little more aggressive in helping with planning and almost provide a template of some of the activities. Need more consistent information.
- Fine. Not sure what they are doing. Not unhappy.
- Little miffed when they didn't like our proposals up front. It's been fine.
- Fine. No problems. Like here are the guidelines and information and if you need help, give us a call. We were involved ahead of time (in the last project). Others had to start at the beginning.
- Leadership is all right. They are doing what we wanted them to do anyway. The money is slow. Like molasses.
- Don't have a sense that I know about the leaders. Not a negative. If they messed up I would find their names and be beating on their door. Would be delighted to know them. But we feel part of the process, not left out. Information is timely. The state hookup to talk about Star Schools was helpful. We modeled the behavior in Distance education.

# Impact on regional collaboration

- Increased between AEA and local schools. Collaboration since star schools started is HUGE increase in working with the community college. Our RTC works well. Has been a vehicle for communication between and among educational institutions. Cooperative classes (with community college). They pay scheduler. Collaboration has increased. Just look at the offerings listed. Have assisted with training when asked. Their response has been good.
- Good collaboration and cooperation here in the past. It helps that we are bringing the colleges into the picture too. The working relationship with the community college has been super. Can't say enough good. Very accommodating. Schools are working together.
- Came through the RTC. Networking when teachers are able to meet other teachers is good. Over the ICN. Regional collaboration is occurring through the RTC.
- Has affected collaboration. Provided a focus for the region. Improved communication and collaboration. One of the facets that has improved collaboration is that it has provided a focus.
- There are different perspectives on what is right. Has improved collaboration. Forced us to come together for both ICN and Internet. Gave us opportunity to see commonalties and some differences have then faded away. Provides for regional solutions. Has changed our jobs though. Has caused re-prioritization in the region. The intent is all about decentralization of information. Everybody has to be working together or it wouldn't
- Certainly coalesced the K-12 group. Caused dissension between the AEA and colleges because of no clear roles. As far as the ICN, the lowa partnership is a unique thing. Levels of education are doing things and talking together that never did in the past. The ICN is the pipeline and bringing the partnerships there to plan is a boon.
- Hasn't had as much effect as it would have had if we have given some money in other areas. We had no teaching technology here, so thought we did a reasonable job of looking for our true needs and the schools recommended that we keep it (\$). They can book the room to bring in speakers. We'll use it to deliver inservice.
- Worked totally with the RTC. The community college and other colleges and agencies are represented. Some collaboration and coordination has not been seen before. Everybody is so cooperative and supportive to make everything run smoothly. From the national guard people and the four-year colleges. The community college has bent over backwards. Can't say enough about the support from them. K-12 schools and everyone is working together.
- Especially since we have a metropolitan technology committee with schools, it was a natural fold in to talk about Internet and ICN. Solidified relationships with the community college. Working with them not just in name only. Feel very good about it.
- Not sure it has had a dramatic impact on K-12 institutions. Another contact. Has increased volume and quality of contact with he community college and other higher education institutions.
- Good. Cooperated better with community college on this than on any other issue.



6/7/96

4

- What has happened because of Star Schools, we have several groups (5 districts) that usually don't work
  together that are now working together. We meet with the group of superintendents every week to talk about
  technology and use of the Internet. It has encouraged schools to hire technology consultants now. Hasn't
  done much for collaboration among institutions. The community college connection was included on Internet
  training. Some connections with the School for the Deaf. Community college is not on Internet yet. Haven't
  really done much with them.
- Don't know that it has been affected on the surface. Some projects were inter-school or inter-district. Group
  efforts within the district in many projects. May not see in Internet activities. Aside from RTC, haven't done
  much. Always got along with college and were closely allied.
- Sincerely believe that this has been a positive thing. When Star Schools part came up for discussion at
  monthly superintendents meeting. Followed up with discussion at two other times. They felt they had impact
  into it. Asked how they would like this to have life. Several superintendents volunteered people for
  committees. The superintendents talked about it as a group; Not as individual LEAs.

### Concerns

- Record keeping. Equity. Some can get and other won't. Problems with clarity. Some think they have money
  and don't. Lack of clear communication. Like to see more assistance in how to use it well. If only see bad
  examples, what do you think they will model?
- Concerns we are hearing from the schools is that they are anxious to get on the ICN. Wish there was more
  money to help them underwrite the cost of it. Little shortfall in underwriting cost for classrooms. Equipping
  not so much a problem as readying the room and locating the FOT room. Involves remodeling costs. That
  hurts schools. They are strapped for money already. Maintenance is a problem. But I am positive and glad
  we got what we got. Just wish there was more is the bottom line.
- Wish we could have more time to deal with funding. High level projects like the bulletin board for on line
  chats takes so much time. Higher level uses. Takes more time than we have to spend the money. The technical
  work takes longer.
- None
- Two years ago, my knuckles were white with fear. Now I just have a few concerns. We've come a long way. On the data side, the legislature is too cheap. Need cascade switches in each region. Could have used frame relay solution out from the beginning. That was a mistake. the local control issue. We wanted it too. Probably would have had to pry our fingers off. But we have a booking system with 9 schools and we wouldn't have wanted local control there. Need centralized control. Local control makes us too expensive and cumbersome and we really don't have a lot of local control anyway. Need to think globally and not just locally. Programs coming into the area need some priority. Could have been a state decision, but people wouldn't give up local control. May evolve to a state system anyway, but it may take a while to happen. Probably should have been state controlled.
- Still an equity issue. Some schools because of the timeline feel they are not getting a piece of the Star Schools. Need to enhance communication. Some feel they cannot participate yet unless the room is in the building. Need to communicate what can happen even before ICN is on site. Emphasize that more. The elementary schools particularly feel left out. Might need to do creative things to get them involved and middle schools sites might help. We are also short staffed at every level. We need to pound on the legislature for that. Naturally we are concerned with the data side. It is a piece of our pipeline. Think Internet will do more for the total K-12 teaching staff than ICN itself. More communication between and among. Focus priority there rather than on distance learning.
- Define what a help desk is.
- Getting reports done. Little rushed on what to put together (for regional plan). Timing was close. Faxed out proposal to RTCs and faxed back and had a discussion.
- Consistent voice. Consistent communications stream. Kind of scattered. Didn't use AEAs as effectively as we could have.
- One of the things that comes to mind is the ICN overall and how quickly local districts can truly take advantage of the capabilities of the system. We've scheduled an area wide implementation this year. That will dramatically change what is happening.
- Been good that there is as much freedom ad local control as there has been. Not centrally controlled this time.
- Not too concerned about it. Been a big help. Concern if it goes away.
- Won't show results as a group. Down the road we'll be ripped. Lot of activities, but not results.
- Responsible for assessment and evaluation piece. If ask me to do assessment/ evaluation, I'm not happy with
  the pluses and minuses. Based on experience, what can we do to plan for the future? Hope what comes out of
  it is written surveys. Want to do person to person discussions. Use evaluation to help with planning.
  Important to me. It is difficult to see the impact.



# Summary of Regional Coordinators Survey Categorized Comments

### Number of coordinators mentioning Ouestions/categories How It Is Going 12 Very well Schools are expressing a lot of interest/excitement 6 6 Demand for connections/frustration with delays in connections 3 Increase in cooperative activities 3 Increase in staff development opportunities and savings in time and money 2 Project was catalyst for getting schools moving to integrate technology 2 Increase in school technology planning 2 Increase in ICN and Internet use Impact on K-12 Schools 6 Has provided incentives to get schools to integrate technology 5 Has promoted curriculum changes 5 Has increased the use of technology in schools 4 Has provided savings in travel time and money for teacher inservices 3 Has increased participation in staff development opportunities 3 Has increased peer sharing and cooperation among schools 3 Has increased training on technology Has provided opportunities through educational events over ICN 2 Satisfaction with Project Management 7 Fairly or very satisfied IPTV is helpful and provides timely information 6 5 Not sure who they are or what they do 3 Need leadership in good practice and with planning 2 Satisfied with distribution of funds 1 Not satisfied with timelines of fund distribution Need more leadership from Iowa Department of Education 1 Alliances formed and are working well 1 Political realities create problems 1 Impact of Project on Regional Collaboration 7 AEA and community college collaboration has improved 6 Collaboration between schools has improved 5 Project has provided a focus for regional collaboration 4 AEA and school collaboration has improved Regional Technology Councils (RTCS) have provided a vehicle for increased 4 collaboration and communication 2 Peer collaboration has increased Collaboration across educational levels has increased 2 Some dissension between AEA and community colleges 1 Concerns Need for clear and consistent information Need for continued funding Need for equity in funding Tasks take longer than planned 3 Local versus centralized control of the system 2 Scheduling difficulties 2 Need to show some results Need for leadership in good distance education practice 2 2 Reports and record keeping



# REGIONAL EVALUATION INSTRUCTIONS Data Regional Partnerships will need to provide to Star Schools Evaluation

List of schools/institutions provided with equipment/funding for ICN video and/or data connections, amount of funding, and a description of the equipment or what the funding was used for. List should be by month.

# Example:

	School/institution	Amount	What
MAY	1996 Ames High School	\$3,000	2 video monitors for ICN class fax machine for ICN class
	AEA	\$20,000	Cisco router
JUN	E 1996 Fellows Elementary, Ames Sawyer Elementary, Ames	\$1,700 \$750	direct connect costs for Internet dial-up costs for Internet

List of schools that have expressed interest in getting connections (ICN or Internet) and potential time frame.

List by month interest was expressed.

# Example:

	School/institution	Type of connection	Time frame
MAY	1996 Roosevelt Elementary, Ames	direct Internet connection	Fall 1996
	Gilbert High School	ICN room	Spring 1997

Star Schools Evaluation, Research Institute for Studies in Education, E005 Lagomarcino Hall, College of Education, Iowa State University, Ames, Iowa 50011.

Telephone (515) 294-7009. Fax (515) 294-9284



List of technology training activities provided partially or fully through Star Schools including description, number of attendees by site, and description of attendees. List activities by month. LIST ONLY ACTIVITIES ORIGINATED IN YOUR REGION.

# Example:

Technology training activity	Description	Number of attendees	Site	Description of attendees
MAY 1996 ICN hands-on training	3-day training on use if equipment in ICN class	5 4 6	Ames Gilbert Johnston	High school teachers High school teachers High school teachers

Evaluations of technology training activities.

Evaluations currently being used in the region are acceptable. If no evaluation is currently being used, region may use form provided (see attached). Copies of evaluations may be sent directly to Star Schools. Evaluation for analysis. For ICN delivered sessions, paper evaluations are not necessary. The last few minutes of the session can be used to ask the questions with someone taking notes and forwarding them to the evaluators.

Star Schools Evaluation, Research Institute for Studies in Education, E005 Lagomarcino Hall, College of Education, Iowa State University, Ames, Iowa 50011.

Telephone (515) 294-7009. Fax (515) 294-9284



List of inservice/staff development activities provided via distance education (not necessarily funded through Star Schools) including number of attendees by site and description of attendees. List activities by month and by delivery system. LIST ONLY ACTIVITIES ORIGINATED IN YOUR REGION.

Example:					
Inservice/staff development	<b>F</b>	lumber	= '	Description	
	of attendee		<u>es</u>	of attendees	
MAY 1996 ICN Deliver	red				
NCTM Standards	1-day training on use of		Ames	Middle school teachers	
	NCTM standards	10	Johnston	Middle school teachers	
Curriculum articulation	3 ICN session to discuss curriculum development and		Ames	High school math teachers	
			Johnston	High school math teachers	
	articulation in mathematics	i 5 3	Gilbert	High school math teachers	
		2	ISU	Math faculty	
MAY 1996 Internet Del	livered			-	
Drug Awareness	Internet discussion on drug abuse prevention strategies facilitated by AEA		3 Ames 2 Johnsto	Elementary guidance n Elementary guidance	

Evaluations of inservice/staff development activities.

Evaluations currently being used in the region are acceptable. They must include evaluation of the delivery system (e.g., the ICN) as a method of instruction. If no evaluation is currently being used, the region may use the form provided (see attached). Copies of evaluations may be sent directly to Star Schools Evaluation for analysis. For ICN delivered sessions, paper evaluations are not necessary. The last few minutes of the session can be used to ask the questions with someone taking notes and forwarding them to the evaluators.

Star Schools Evaluation, Research Institute for Studies in Education, E005 Lagomarcino Hall, College of Education, Iowa State University, Ames, Iowa 50011.

Telephone (515) 294-7009. Fax (515) 294-9284



List of schools receiving technology planning assistance with description of assistance provided by month.

# Example:

	School/institution	Assistance provided
MAY	1996 Ames High School	Meeting with school technology committee to discuss LAN
	7 Ames Elementary Schools	Responded to survey to assess technology needs. Each provided with a need assessment report.

- Description of equipment/facilities/lines from existing systems connected to infrastructure.
- List of educational institutions acquiring technology through Star Schools since 1992 (when Iowa project began) including description of the technology.
- List of institutions participating in RTCs and other telecommunications partnerships in the region and their role in regional telecommunications activities.



# Staff Development Participant Survey

Name of Session:	-				
Location attended:			Date:		
Part I Demographic Information					
Gender:Male		Female	2		
District you represent:					
Level: Elementar Middle Sci High School	nool		Community 6 4-year colleg		
Part II Session Evaluation					
<ol> <li>Please rate the overall eff</li> <li>2</li> </ol>	ectiveness	of this inse	rvice/staff de 4	velopment ac 5	tivity. 6
very ineffective ineffective	somewh ineffecti	at ve	somewhat effective	effective	very effective
2. List 1-2 things you liked	best about t	this inservi	ce/staff devel	lopment activ	ity.
3. Provide 1-2 suggestions for	or improvir	ng this inse	rvice/staff de	velopment ac	tivity.
4. Please rate the effectivene activity.	ess of using	the ICN to	o deliver this	inservice/sta	ff development
1 2 very ineffective ineffective	3 somewho ineffectiv		4 somewhat effective	5 effective	6 very effective
5. List 1-2 things you liked be activity.	oest <b>a</b> bout 1	ising the I	CN for this in	service/staff	development
6. List 1-2 things you would inservice/staff developm	like to see i ent activitie	improved o	or changed wh	en using the l	ICN to deliver



# . NTAEA Staff Development Course Evaluation

Course Title: <u>Using Internet in the Schools</u> Date: <u>2/13/96</u>

Instructor's Name:

Course:

Please Respond on a Scale of 1-4

(1= Strongly Disagree; 2= Disagree; 3= Agree; 4= Strongly Agree)

- 3.8 The course content was current, substantial and research based.
- 3.7 The content was practical and relevant to participants' needs/lives.
- 3.8 The objectives and requirements for the course were made clear and realistic.
- 3.9 The course requirements were appropriate and reasonable in terms of the academic credit awarded.
- 3.6 The evaluation of student performance/work was clearly understood, fair, and appropriate for the learning.
- 3.2 A variety of approaches, including the use of social technology, were used to accommodate learning styles.
- 3.3 Class presentations were well organized and easy to follow.
- \_3.7 Instruction was student-centered with the instructor as facilitator and students spending a majority of time interacting with each other.
- 3.7 The instructor used effective and appropriate (culture/race/gender) examples to clarify concepts.
- 3.9 I was challenged to think in new ways and increase my depth of learning.
- 3.6 Instructional facilities and materials were adequate, appropriate and effectively used.
- 3.8 Instructor was responsive to participants' feedback and questions.
- 3.9 Instructor demonstrated enthusiasm for the topic and made learning fun.
- 3.8 I can recommend this course to other educators.

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# COMMENTS

# sing Internet in the Schools-Feb. 13, 1996

# How will this course enhance your ability to perform your professional 1. responsibilities?

-- I've learned something about how to use Internet and various methods of searching to get information. (3)

-- I E-mail now to many associates; I will use the search functions for information for classes

-- I will be able to find information I would have never been able to find for my students.

-- When we get Internet, we will be able to research on it

-- I realize the effort and systems involved in Internet searches and hopefully, I will have the opportunity to use this for needed information

-- It will take TIME at the computer to do this, but at least I am started.

-- Become more aware of the outside world

-- It offers tremendous resources if we ever get hooked to the Net in our district.

-- This is just a starter course for me

-- I better understand some technology "jargon"

-- I plan to search for lab ideas and info pertaining to my subject areas.

I know more about what's available with Internet-- I feel like I can find usable "stuff"

The use of E-mail will benefit the most at this time

# What activities in this class enabled you to learn to your best ability? 2.

-- Everything worked okay!

-- Searching Fetch and Netscape

-- Practice time-- learn by doing (4); Netscape was interesting

-- Demonstrations followed by hands-on (3)

- -- Use of News watcher, Gopher and Eudora
- -- When we had time to roam the net on our own.

-- All activities were helpful

-- Directions, practice

-- Actually working through the projects

-- E-mail - Eudora; Newswatch and Netscape

# What activities in this class acted as barriers to your learning? 3.

-- Not getting into areas on the Internet because they were full.

-- Time needed to get all computers working

-- Not having any knowledge about Internet

-- I needed more concept/overview development in the beginning. I'm finally getting the full

-- The technical difficulties and getting setup. Also, there is just so much to learn

-- Fetch activities did not work well (2)

-- We moved too fast without much practice. That would have been ok, if we had a place to practice.

-- Getting "stuck" in the computer, frustrating

-- Starting late - less time to search

# What suggestions do you have for future staff development opportunities? 4.

-- More on E-mail

- -- How do you get beginner students to use Interent and not use a lot of time?
- -- Keep class size small; continue to have assistants available to trouble shoot

-- more classes like this

- -- Chiphead meetings from AEA
- -- more practice time

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# 5. How did you hear about this class?

-- Through the AEA - course catalog (11)

-- Mail to school --catalogs and flyers (3)

-- A teacher in my building mentioned it so I looked in the Course Catalog of AEA

# NTAEA Staff Development Course Evaluation

Course Title: Internet in the Schools - Sec. 4 Date: 2/15/96

Instructor's Name:

# Please Respond on a Scale of 1-4

(1= Strongly Disagree; 2= Disagree; 3= Agree; 4= Strongly Agree)

- 3.8 The course content was current, substantial and research based.
- 3.6 The content was practical and relevant to participants' needs/lives.
- 3.6 The objectives and requirements for the course were made clear and realistic.
- The course requirements were appropriate and reasonable in terms of the academic credit awarded.
  - 3.6 The evaluation of student performance/work was clearly understood, fair, and appropriate for the learning.
  - 3.6 A variety of approaches, including the use of social technology, were used to accommodate learning styles.
  - 3.4 Class presentations were well organized and easy to follow.
  - 3.6 Instruction was student-centered with the instructor as facilitator and students spending a majority of time interacting with each other.
  - 3.6 The instructor used effective and appropriate (culture/race/gender) examples to clarify concepts.
  - 3.8 I was challenged to think in new ways and increase my depth of learning.
  - 3.6 Instructional facilities and materials were adequate, appropriate and effectively used.
  - 3.8 Instructor was responsive to participants' feedback and questions.
  - 3.9 Instructor demonstrated enthusiasm for the topic and made learning fun.
  - 3.8 I can recommend this course to other educators.



### COMMENTS

### net in the Schools - Feb. 15, 1996

### How will this course enhance your ability to perform your professional responsibilities?

- -- More avenues for info
- -- In my classroom; for my personal use to improve lessons
- -- Visit Web sites relevant to topics we're studying
- -- This gave me more confidence in using the computer as a tool for education
- -- Keep up on current technology (2)
- -- I have the Internet in my classroom had I not taken the class, I'd be very lost at this point.
- -- I learned skills to use the Internet to gain info to enhance my teaching and activities to be used in the classroom
- -- Good intro to Internet
- -- Lots of applications for school. I just need to get more time and experience at it.
- -- Internet is available in our school. We need to know about it
- -- Help get information more easily

### What activities in this class enabled you to learn to your best ability? 2.

- -- Hands-on activities on computers. (5)
- -- Web surfing (2)
- -- Experience and guidance through material
- -- User friendly manual
- -- Demonstration of usage-- then guided practice, example Netscape usage (3)
- -- Good attitude by instructors
- -- Interacting with others

### What activities in this class acted as barriers to your learning? 3.

- -- Very good handouts
- -- Some nights there were too many people and not enough computers
- -- Speed of computers (2)
- -- Internet not available in our school!
- -- Too many servers -- not enough time to practice
- -- SNOW!
- Not all of us couuld be in the same area and have our own computer

### What suggestions do you have for future staff development opportunities? 4.

- -- An easier manual to follow
- -- Continued computer experiences
- -- Only present E-mail and Netscape
- -- Very specific detailed instructions I can use independently



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### Interactive Television Workshop Evaluation Survey April 30, May 1-2

**Data Collection:** Participants were asked to complete a survey consisting of two parts. Part I asked for demographic information and Part II asked participants to list what they liked and suggestions for improving both content and delivery(using the ICN).

Participants: Ten individuals completed surveys at the end of the workshop.

Gender:	Male	4	Female	6
Level:	Elementary High School	3 3	Middle/High School K-12	3 1
Position:	Teacher	8	Media Specialist	2

### Summary of open-ended questions:

ary of open-ended questions:	
1. List 2-3 things you liked best about the content of this session.	Number of times mentioned
Doing mini-lessons(student demonstrations)	3
Hands-on	2
Instructor	2
Materials	1
Mechanics of how to operate the system	3
Organized presentations	1
Technology	3
Tips on how to present over the ICN	2
Usable, relevant information	1
2. List your suggestions to help us improve the content of this session.	
Add more on how to use equipment and materials	1
Change order of presentations	1
Change first day	3
Get rid of history and administrative structure of the ICN	1
More hands-on	1
3. List 2-3 things you liked best about using the ICN for this session.	
Being at remote and at the origination site	1
Creativity that could be used	1
Exciting	1
First time experience	1
Fun	1
Good practice time	1
Hands-on	1
Interesting	1
Loved it	1
Nice relaxed atmosphere	1
Personal	1
Use as a self-evaluation technique	1
4. List your suggestions to help us make our use of the ICN more effective	
Get grade level teachers together over the ICN twice a year	1
Get more comfortable chairs	1
More instruction time	1
Open it up for public production so we can use it and be able to exp	oress
and spread the new technology	1
<del>-</del>	



### Staff Development Participant Survey . .

Name of Session:	ICN
Date of Session:	
Location of Session:	
Part I Demographic Infor  1. Gender:  ————	•
2. District you represent:	وتعمير المستوالية المس
	_Elementary _Middle School _High School _Community College _College/University
4. If you teach please tell	us what subject/content area:
Part II Session Evaluatio 1. List 2-3 things you like	n ed best about the content of this session.
2. List your suggestions	to help us improve the content of this session.
•	
3. List 2-3 things you lik	ed best about using the ICN for this session.
Éja	ting Achnology
4. List your suggestions	help us make our use of the ICN more effective.

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### Appendix D:

### ICN and Internet Connections

Key to Matrix of Iowa School Districts

Matrix: Iowa School Districts

Table: Description of Iowa Schools with ICN or

Internet Access

Chart: Location of Operational ICN Video

Classrooms

Chart: Hours of ICN Use by Semester

Chart: Percent of Total ICN Use by

**Educational Level** 

Chart: Types of Instructional Use of ICN

by Semester

Chart: K-12 Courses on the ICN by Semester

Table: K-12 Courses on the ICN by Semester

Matrix: Iowa School Districts Participating in

ICN Courses



### Iowa School Districts: Underserved Populations, ICN Classrooms, Internet Locations, and Project Participants

(1) Minority Enrollment:

M1=>3.6% (state average) and more than 250 students M2=>3.6% but fewer than 250 students

(2) Percent (of students) Eligible for Free and Reduced Lunch:

L1=>50% L2=33.1% - 50% L3=25% - 33%

(3) County Poverty Rate (percentage of 17-year-olds and younger living in poverty):

P1=>25% P2=20.1% - 25% P3=15.1% - 20%

(4) Rural County:

R1=population <2,500 R2=population 2,500-19,999

(5) ICN Classrooms in District:

=were connected to ICN prior to 1995
 X=connected to ICN since 1995
 A=scheduled to be connected to ICN during 1996/1997 school year
 B=scheduled to be connected to ICN during 1997/1998 school year

(6) Internet Site:

X=have received funding for Internet connection A=scheduled to receive funding for Internet connection in 1996/97

(7) Curriculum or Exemplary Project Site:

M=participating in project to develop multimedia instructional materials
E=participating in project to develop exemplary technology applications for classroom use



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# Iowa School Districts: Underserved Populations, ICN Classrooms, Internet Locations, and Project Participants

	Curriculum or Exemplary Project Site (7)				M, E																					M
7	Internet Site (6)	А	А		А	A			А	А	Α	A		A	A	А	А	А		A		A	A		А	Ą
	ICN Classrooms in District (5)	•	•	×	X AAA BB				В	×	•			•			ו			•					•	ו
(2)	District Enroll- ment <600					Х		×	X	×						X			×			×		×		
	Rural County (4)	. Z2	R1	172		K2	R2	R2	R1	R1	R2	. R2	R1	R2	R2	R2	R2·	R2	R2	<b>K2</b>	R1	R2	K2	R2	R2	
, , , , , , , , , , , , , , , , , , , ,	County Poverty Rate (3)		P3				P3		P3	P3		P3	P3		P3		P3				P3	F3	E-J	F3	E-J	
	Percent Eligible for Free and Reduced Lunch (2)	13	175		13	1.2			F3	L3	ខា		L3	EJ.	L3	1.2	ដ		ខា		L3		77	77		
diamond, and creek comply and a	Limited English Proficiency (>25 Students)				×																					
ירו ארמי זיינ	Minority Enrollment (1)				M1																					
10: 011461	Chapter 1 Concentration District				×										×		×	×			×	×	×	×	×	×
10Wa Sciloui Distincis, Olineiscivea i op	Iowa School District	Allamakee	Central	Decorah	Dubuque	Eastern Allamakee	Edgewood-Colesburg	Fredericksburg	Garnavillo	Guttenburg	Howard-Winneshiek	Maguoketa Valley	M-F-L Mar Mac	New Hampton	North Favette	North Winneshiek	Oelwein	Postville	Riceville	South Winneshiek	Starmont	Turkey Valley	Vallev	West Central	West Delaware County	Mestern Dubuque
	AEA #	$\top$	T	$\top$	T			T	T	Ť	-	1	-	T	1	7 -	1-	1	Τ	Τ	-	1-	$\top$	1	Т	-

Iowa School Districts: Underserved Populations, ICN Classrooms, Internet Locations, and Project Participants

m y	ite						$\neg$	$\neg$													Ţ					
Curriculum or Exemplary	Project Site (7)				Σ	Σ			ш			Σ										Σ				
	Internet Site (6)			×		×		A			×					×		×						А		
	ICN Classrooms in District (5)	В		×	• X A	×	А	•	•	А	ו	×	• X X A	В	А	×	•	•	А		А	А	В	В	А	×
District	Enroll- ment <600		×	×			×			X				х .	Х	X			×		×		×	Х		×
Rural	County (4)	R2	R2	R2	R2		R2	R2	R2	R1	R2	R2			R2	R1	R1	R2	٠,	22	72	72	R2		R2	221
County	Poverty Rate (3)				P3										P3					P3						
Percent Eligible for Free and	Reduced Lunch (2)		ខា		1.2		L2				13		F7	L2		1.2	ខា	ខា		ដ	ដ		L2		ដ	13
Limited English	Proficiency (>25 Students)			×							×															
Minority	Enrollment (1)			M2		M2		M2			M2		M1													
Chapter 1	tration District				×					×					×			×		×						
	Iowa School District	Belmond-Klemme	Buffalo Center-Rake-Lakota	Cal	Charles City	Clear Lake	Corwith-Wesley	Forest City	Garner-Hayfield	Greene	Hampton-Dumont	Lake Mills	Mason City	Meservev-Thorton	Nora Springs-Rock Falls	North Central	Northwood-Kensett	Osage	Rockwell-Swaledale	Rudd-Rockford-Marble Rock	Sheffield-Chapin	St. Ansgar	Thompson	Ventura	West Hancock	Woden-Crystal Lake
	AEA #	1	1	Т	1		2		1	1	$\top$	2	T	T		Т	П	T	П	2	2	2	2	2	2	T

(1) (1)

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	Curriculum or Exemplary Project Site																			
ipants	C. E. Internet P. Site (6)					×	×		A	×		×	A			×	A		А	
ulations, ICN Classrooms, Internet Locations, and Project Participants	ICN Classrooms in District (5)	ו				×ו	• X A		A			В				×ו	•			
itions, an	District Enroll- ment <600		×	X	×			×	×	×	×		×	×	×			×	X	×
net Loca	Rural County (4)	<b>K</b> 2	<b>K</b> 2	R2	R2	R2	R2	R2	R2	<b>K</b> 2	R2	R2	22	R2	22	122	R2	R2	R2	22
ms, Inter	County Poverty Rate (3)		P3			P2	P3	P2					P2							P2
N Classroo	Percent Eligible for Free and Reduced Lunch (2)	L3	L3	L2	L2	13	L2	L2	L3	L1	L3			L3	L3			L3		ដ
ulations, IC	Limited English Proficiency (>25 Students)																			
served Pop	Minority Enrollment						M2													
ets: Unders	Chapter 1 Concen- tration District		X			×	×	×	X				×	×				×		×
Iowa School Districts: Underserved Pop	Iowa School District	Algona	Armstrong-Ringsted	Burt	Clay Central/Everly	Emmetsburg	Estherville	Graettinger	Harris-Lake Park	Lu Verne	North Kossuth	Okoboji	Ruthven-Ayrshire	Sentral	South Clay	Spencer	Spirit Lake	Terril	Titonka Consolidated	West Bend-Mallard
	AEA #	3	က	3	3	3	3	3	3	3	က	3	က	3	3	3	3	3	3	3

(N)





Iowa School Districts: Underserved Populations, ICN Classrooms, Internet Locations, and Project Participants

	JOWA DOILOUT DISTITUTE STREETS ET		In a main	· · · · · · · · · · · · · · · · · · ·		•					
					Percent				•	•	Curriculum
AEA		Chapter 1 Concentration	Minority Enrollment	Limited English Proficiency	Eligible for Free and Reduced	County Poverty	Rural County	District Enroll-	ICN Classrooms	Internet Site (6)	Exemplary Project Site
#	Iowa School District	District	(I)	(>72 Students)	rancu (z)	Male (5)	(E)	יייביוני למממ	(a) 1311112   111	(2)	
4	Boyden-Hull						23	×	×	₹ ;	
4	Central Lyon	×				P3	K2		•	×	
4		×				P3	23	×	В	A	
4		×			L3	P3	23			A	
4	Τ	×			L2	P3	R2	×		A	
4	Τ						122			A	
4	1						R2		ВВ	A	
<u> </u>	$\top$				1.2		R2	X		А	
1 4	1	×	M2			P3	R2		• X A	A	
4	1	×					22		•	A	
4	1					·	<b>K2</b>		• X A	A	
4	T				F7	P3	R2			A	
, 4	Τ	×				P3	R2			×	
	T				L2		123		В	4	

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Iowa School Districts: Underserved Populations, ICN Classroo	lassrooms, Internet Locations, and Project Participants	
opulations, ICN C	srooi	
opulations, IC	Clas	
Iowa School Districts: Underserved Populations, 1	N C S	
Iowa School Districts: Un	nderserved Populations, l	
Iowa School District	s: Un	
	Iowa School Districts	

Five and Routh (but)         County (cut)         Rural (cut) (cut)         County (cut)         Intervet (cut) (cut)         Intervet (cut) (cut)         Intervet (cut)	Chanter1		Chanter 1		<b>—</b>	Percent Eligible for						Curriculum or
13	Minority Enrollment (1)	Minority Enrollment (1)	_	Pr (>25		Free and Reduced Lunch (2)	County Poverty Rate (3)	Rural County (4)	District Enroll- ment <600	ICN Classrooms in District (5)	Internet Site (6)	Exemplary Project Site (7)
13   R2   R2   R3   R4   R5   R5   R5   R5   R5   R5   R5						L3		R2	×			
12	Alta M2	M2	M2			1.3		72			٧	
1.2	Clarion-Goldfield M2	M2	M2					R2				
L3	Dows M2	M2	M2	1		1.2		<b>K</b> 2	×		∢ .	
12   P3   R2   X   • XXAA   1   1   1   1   1   1   1   1   1	Eagle Grove X	X		l		[3		22			4	
L3   P3   P4   P4   P4   P4   P4   P4   P	East Greene X	X		. !		1.2	P3	22	×		V	
L2   R2   X	Fort Dodge X M1		M1			1.3	P3			XXA	A	
L3       R3       R2       • • • × × ×         L3       R3       R2       • • × × ×         L3       R3       R2       • • × × ×         L3       R1       X       B         L1       R2       X       B         L2       R3       R2       X         L3       R3       R2       X         L3       R3       R4       • •         L3       R3       R4       • •         L3       R3       R4       • •         L3       R3       R2       ×         L4       P3       R4       ×         L4       P3       R4       ×         L4       P3       R4       ×         L4       P3       R4       ×         L5       P3       R4       ×         L5       P3       R4       ×         L5 <td>Gilmore City-Bradgate X</td> <td>×</td> <td></td> <td></td> <td></td> <td>L2</td> <td></td> <td>22</td> <td>×</td> <td></td> <td>4</td> <td></td>	Gilmore City-Bradgate X	×				L2		22	×		4	
L3       P3       R2       X         L3       P3       R2       X         L3       R1       X       B         L1       R1       X       B         L1       R2       X       B         L2       P3       R2       X         L3       P3       R2       X         L3       P3       R1       *         L3       P3       R1       *         L3       P3       R2       X         L3       P3       R2       *         L4       P3       R2       *         L2       P3       R2       X         L2       P3       R2       X         L2       P3       R2       X         L2       P3       R2       X         L2       P3       X       X         L3       P4       X       X         L4       P4       X	Humboldt							72		•		
L3   P3   R2   X   B     L3   R1   X   B     L1   R2   X   B     L1   R2   X   B     L2   P3   R2   X     L3   P3   R2   X     L3   P3   R1   X     L3   P3   R1   X     L3   P3   R2   X     L3   P3   R2   X     L4   P3   R2   X     L5   P3   R5   X     L5   P4   P4     R5   P4   P4     P4   P4   P4     P5   P4   P4     P5   P5   P5     P5   P5   P5     P5   P5	lefferson-Scranton X	×				F7	P3	22			×	
L3   R1   X   B	Lake View-Auburn					[3	P3	<b>K2</b>	×			
R1	Laurens-Marathon					£.1		R1	×	В	4	
L1	Manson-Northwest Webster X	×						R1		В	4	
L2       R2       X         L2       P3       R2       X         L3       R3       X       •         L3       R1       ×       •         L3       R1       X       •         L3       R3       R1       •         L3       R3       R2       X       •         L2       P3       R2       X       •       C         L2       P3       R2       X       •       C         L2       P3       R2       X       •       C         L2       P3       R2       X       C       C         L2       P3       R2       X       C       C         L2       P3       R2       X       C       C         L2       P3       R3       X       C       C         L2       R3       R4       X       C       C         L3       R4       R4       C       C       C       C	Newell-Fonda M2	M2	M2			L1		22	×			
L2       P3       R2       X         L3       P3       R2       X         L3       R1       X       •         L2       R1       X       •         L3       P3       R1       X       •         L3       P3       R2       X       •         L2       P3       R2       X       •         L3       P3       X       •       ×         L4       P3       R4       •       ×       ×         L4       P3       R4       •       •       ×       ×         L5       P3       R4       •       •       ×       ×         L5       P3       R4       •       • <td>Northeast Hamilton</td> <td></td> <td></td> <td></td> <td></td> <td>L2</td> <td></td> <td>22</td> <td>×</td> <td></td> <td>٨</td> <td></td>	Northeast Hamilton					L2		22	×		٨	
L3       R3       R2       X         L3       R1       •         L2       R1       X         L3       R3       R1       X         L3       R3       R2       X         L2       R3       R2       X         L2       R3       R2       X         L2       R3       R2       X         L2       R3       X       X         L3       R4       X       X	Odebolt-Arthur X	×		_ 1		L2	P3	22	×		V	
L3         R1         •           L2         R1         X           L3         P3         R1         •           L3         R1         •         •           L3         P3         R2         X         •           L2         P3         R2         X         •           L2         P3         R2         X            L2         P3         X         X            L2         P3         X         X            L2         P3         R1         X            L2         P3         R1         ×XX	Paton-Churdan X	×				1.3	P3	22	×			
L2 R1 X  L3 P3 R2 X  L2 P3 R2 X  L2 P3 R2 X  R2 X  L2 R2 X  R2 X  L2 R2 X  R3 R2 X  R2 R2 X  R2 R2 X  R3 R2	Pocahontas Area X	×				13		R1		•	۷	
L3       P3       R1       •         L3       R1       •       •         L3       P3       R2       ×       •         L2       P3       R2       ×       •         L2       P3       R2       ×       •         L2       P3       X       ×       •         L2       P3       X       •       ×         L2       P3       R1       •       ×         L2       R3       •       •       ×	Pomeroy-Palmer					L2		<b>E</b> 3	×			
L3       R1       •         L3       P3       R2       X         L2       P3       R2       X         L2       R2       X       C         L2       P3       X       X         L2       P3       X       X         L2       P3       R1       X         L2       R2       X       C         L2       R3       R1       X	Prairie Valley X	X				1.3	P3				×	
L3 P3 R2 X  L2 P3 R2	Rockwell City-Lytton					[13		E2		•	4	
L2         P3         R2         R2         R2         R2         R2         R2         R2         R3         R4         R4<	Sac					F.3	P3	72	×	•		
L2         R2         R2           L2         R3         X           L2         R1         *XX           L2         R1         *XX	Schaller-Crestland			L		L2	P3	<b>K</b> 2				
L2         P3         X         X           L2         R1         **         **           L2         R2         **         **	Sinty Central					L2		R2			A	
L2         P3         X           R1         R1           L2         R2	South Hamilton M2	M2	M2	L				. Z2		•	A	
R1 R2 • XX	Southoast Webster X	×		L		L2	P3		×		Ч	
L2 R2 • XX				↓_				R1			A	
	Storm Lake M1	M1	M1		×	T7		R2		×ו	A	

Iowa School Districts: Underserved Populations, ICN Classrooms, Internet Locations, and Project Participants

Chapter 1         Minority tration         English Free and tration         Proficiency County Lization         Reduced District         Poverty County Ax         Rural County County County County County County Ment <600	- 1	John Strain Council Co		1,							•	
X         L3         R2         X         A           12         R2         X         A         A           X         L2         R3         R2         X         B           X         L3         R3         R4         R         R	Iowa	School District	Chapter 1 Concentration District	Minority Enrollment (1)	Limited English Proficiency (>25 Students)	Percent Eligible for Free and Reduced Lunch (2)	County Poverty Rate (3)	Rural County (4)	District Enroll- ment <600	ICN Classrooms in District (5)	Internet Site (6)	Exemplary Project Site
X         L2         R2         X         A           12         P3         R2         X         B         C           12         P3         R2         X         B         C           12         P3         R2         X         A         R	Stratford		×			L3			X		А	
X         L2         P3         R2         X         B           ,         X         L3         R2         *X         A	Twin Rivers	S				1.2		R2	X		A	
X	Wall Lake		×			1.2	P3	R2	×	В		,
	Webster City	itv	×			гз		<b>K</b> 2		• X	A	M

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Iowa School Districts: Underserved Populations, ICN Classrooms, Internet Locations, and Project Participants

	10wa School Districts: Underserved l'opulations, ICIN Classrooms, internet Locations, and i roject l'alucipants	cts: Unaer	servea rop	ulations, IC.	N Classroc	ms, inter	net Loca	uous, an	מוש זוס)ברו	cipants	
AEA #	Iowa School District	Chapter 1 Concentration District	Minority Enrollment (1)	Limited English Proficiency (>25 Students)	Percent Eligible for Free and Reduced Lunch (2)	County Poverty Rate (3)	Rural County (4)	District Enroll- ment <600	ICN Classrooms in District (5)	Internet Site (6)	Curriculum or Exemplary Project Site (7)
9	Ackle		M2	×	1.3		173		×		M
9	Alden		M2		L2		R2	×	X		Z
9	BCLUW						R2		×		Σ
9	Brooklyn-Guernsey-Malcolm		,				<b>K</b> 2		A		M
9	East Marshall								×		Σ
9	Eldora-New Providence				L3		R2		A		Σ
9	Gladbrook						R2	×	А		M
9	GMG						R2	×	А		×
9	Grinnell-Newburg		M2			•	R2	-	• X		Σ
9	Hubbard-Radcliffe				L3		R2	×	А		×
9	Iowa Falls						R2		×ו		×
9	Marshalltown		M1	×	F7				•XXXXXXX		×
9	Montezuma						R2		×		×
9	South Tama County		M1	×	£.1		R2		×		M, E
9	Wellsburg-Steamboat Rock				F.3		<b>K2</b>	×	A		×
9	West Marshall		-						×		M

(n) (m)

Iowa School Districts: Underserved Populations, ICN Classrooms, Internet Locations, and Project Participants

_		_		-,																	_						<b>—</b>
	Curriculum or Exemplary Project Site	(2)									Э																
,[	Internet	Site (b)																			:						
	ICN Classrooms	in District (5)	Υ•	ļ	XXXAB					٨	ו		ו		В									В		××ו	×ו
	District Enroll-	ment <600	<b>~</b>	×		×		×	×				•	×		X			×	×	×		×				
	Rural County	(4)	K1	R1		R1		<b>K</b> 2		R2	R2		R2		R2	R2	R1	R2	R1		R2						
	County Poverty	Kate (3)			P3				P3	74		P3	P2		P2									P3		P3	
	Percent Eligible for Free and Reduced			L3					L3							ខា	F.3			F3			F.3			L2.	
	Limited English Proficiency	(>25 Students)													×										×	×	
1	ity	(I)			M1																					M1	
	Chapter 1 Concentration	District							X	×			×		×	×	×					×	×	×	×	×	
		Iowa School District	Allison-Bristow	Aplington	Cedar Falls	Clarksville	Denver	Dike	Dunkerton	East Buchanan	Grundy Center	Hudson	Independence	Janesville Consolidated	Jesup	Nashua	New Hartford	North Tama County	Parkersburg	Plainfield	Reinbeck	Summer	Tripoli	Union	Wapsie Valley	Waterloo	Waverly-Shell Rock
	AEA	╗	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7

Iowa School Districts: Underserved Populations, ICN Classrooms, Internet Locations, and Project Participants

				I	Т			Ŧ			T	1	7	7	7	T	T	1	П	$\neg \neg$	T	П	$\neg$
Curriculum or	Project Site								Ξ		ш		田										
	Internet Site (6)																						
	ICN Classrooms in District (5)		В		• X X A B	××			• X X A	В	XXAABB					×.	××·	XA		В			
7.7.70	Enroll- ment <600	X		×		×						×		×							×		
14	Kurai County (4)	R2	R2	R2						R1			R2	R2	R1	17.2					R2		
	County Poverty Rate (3)	P3	P3		P3						P3			P3		P3		P3		P3	P3		,
Percent Eligible for	rree and Reduced Lunch (2)		L3						L3	77	1.2	£1				£.1	L3					L3	
Limited	Engilsh Proficiency (>25 Students)									×	×						×					X	
	Minority Enrollment (1)				M1				IM1	M1	M1				M2		M1			M2		M1	
Chapter 1	Concen- tration District	×	×											X		×					×		
	Iowa School District	Andrew	Bellevue	Bennett	Bettendorf	Calamus/Wheatland	Camanche	Central Clinton	Clinton	Columbus	Davenport	Delwood	Durant	East Central	Louisa-Muscatine	Maquoketa	Muscatine	North Scott	Northeast	Pleasant Valley	Preston	West Liberty	Wilton
	AEA #	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6



Research Institute for Studies in Education, Page 10

Iowa School Districts: Underserved Populations, ICN Classrooms, Internet Locations, and Project Participants

	Curriculum or Exemplary Project Site	_		XA			XA M	Ħ	X E		XA M		XA	XA M			XA		XA	XA M	A		XA M	×	×	XA		×		
,	ICN Classrooms Inte	+		-	В	B B	•XXXXXXAAAAAA X	В		B B	(	В	B	X		А	•XXXXXXABBB >	В	В	`			×		,	• X B ×	В	В		<u> </u>
		ment <000					ו		X			X	Х	Х	×		•				×	×								×
	Rural County	(4)	Ę	22	22	R2						R1	R1	R1	K2				R1					. R2	R2	723				R2
	County Poverty	Kate (3)																												
	Percent Eligible for Free and Reduced	ranch (2)					F.3					1.2													L2					1.2
	Limited English Proficiency	(>25 Students)					×										×													
7	ity nent	Œ					M1				M2	M2					M1			. M2		M2								
	Chapter 1 Concentration	District											×												×					X
		Iowa School District	Alburnett	Anamosa	Belle Plaine	Benton	Cedar Rapids	Center Point-Urbana	Central City	Clear Creek-Amana	College	Deep River-Millersburg	English Valleys	H-L-V	Highland	IA Braille & Sight School	Iowa City	IA Mennonite	Iowa Valley	Linn-Mar	Lisbon	Lone Tree	Marion Independent	Mid-Prairie	Midland	Monticello	Mount Vernon	North Cedar	North Linn	Olin Consolidated
	AEA	# 5	2	10	10	10	101	10	10	10	10	10	2	12	12	10	10	12	10	10	10	10	10	10	10	10	10	10	101	1

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Iowa School Districts: Underserved Populations, ICN Classrooms, Internet Locations, and Project Participants

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AEA #	Iowa School District	Chapter 1 Concen- tration District	Minority Enrollment (1)	Limited English Proficiency (>25 Students)	Percent Eligible for Free and Reduced Lunch (2)	County Poverty Rate (3)	Rural County (4)	District Enroll- ment <600	ICN Classrooms in District (5)	Internet Site (6)	Curriculum or Exemplary Project Site (7)
10	Solon									XA	
10	10 Springville							X	В		
10	10 Tipton						R2		ו	ХА	
10	10 Vinton-Shellsburg	×			E3		23		• X A B	×	
10	10 Washington		M2	×			72		×ו	Α	
10	10 West Branch						22				
10	10 Williamsburg						R1		• X B	XA	

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Iowa School Districts: Underserved Populations, ICN Classrooms, Internet Locations, and Project Participants

	Curriculum or Exemplary Project Site		Σ	M, M	M, E		Z		M		M			M	Σ			M	M, M		Σ						Σ	Σ	Σ	
			_	2	۷ 																				-					
Lipanie	Internet Site (6)				×	×																							×	
ulations, ICIN Classrooms, internet Locations, and Lioject Laticipains	ICN Classrooms in District (5)	В	•	×××·•	• B	ו		В		8 X •		• XBB	В	В	В	В	×		•XXAAAAAA		В	А	В			•	•	В	•XXXXXXX	
ations, an	District Enroll- ment <600	×						X						×		×				×	×	×		×	×	×				
נופו דיסכי	Rural County (4)	R1				R2		R1		<b>K2</b>		. ZX	R2			123					K2	<b>K</b> 2		R2	R2	R1		R2		٠
ims, inter	County Poverty Rate (3)					P3															P3	P3						P3		
N Classroo	Percent Eligible for Free and Reduced Lunch (2)	1.2						F7				F73				1.2			1.2	1.2		L2			L1	77				
	Limited English Proficiency (>25 Students)			×															×											
served rop	Minority Enrollment (1)			M1													M2		M			M2	M2						M2	
its: Under	Chapter 1 Concentration	×				×										×						×		×				×		
lowa School Districts: Underserved Fop	A Towa School District	Adair	T	十	$\top$	1	1		T	1		1	Т	1	1	1	1		T	7	1	1 -	l Gilbert	Glidden-Ralston	l Grand	1	1		Т	
	AEA #	= =	=		1	11	11	11				F	]=				11	=			F	=	1	11	11	1		=	11	



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	Curriculum or Exemplary Project Site	} ≥						M	Σ		M	M, E			Σ	M	M, M	Σ		M	M	Σ	Σ			Σ	X	Σ	Σ	171, 171
				-		-																			_			_		
-	Internet	2116					×																			A				
	ICN Classrooms	III District (3)	۱,	В	В	В	В	В	В	ו	В	В	В	В		• B		В	В	Ą	В	В	В			×		В	XXXB	
,	District Enroll-	ווובווו אמממ	;	×	×	×	X	X																×	×	-	×			
	Rural County	62	2 2	23	<b>K2</b>	R2		R2		R2			R2	R1	R2	R2_		R2					R1	R2	R2					
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	County Poverty	Naie (3)																					•							
	Percent Eligible for Free and Reduced	rancii (2)				L3		L3						L3			L2			L3										
To Concerning	Limited English Proficiency															×	×									×			X	
do c ma crac	Minority Enrollment	(1)							M2							M2	M2			M2						M2	M2		M1	-
10: 01:	Chapter 1 Concentration	DISTRICT				×								×			×					×	×							
TOWE SCHOOL DISTILL		Iowa School District	Knoxviile	Lynnville-Sully	Madrid	Manning	Martensdale-St.Marys	Melcher-Dallas	Nevada	Newton	North Polk	Norwalk	Ogden	Panorama	PCM	Pella	Perry	Pleasantville	Roland-Story	Saydel Consolidated	Southeast Polk	Southeast Warren	Stuart-Menlo	Twin Cedars	United	Urbandale	Van Meter	Waukee	West Des Moines	
	AEA	$\top$	$\neg$	11	11	11	11	Ī	11	11	=	11	11	11	=	1	Γ	11	11	1	11	=	11	11	11	=	11	11	=	

### Research Institute for Studies in Education, Page 14

# Iowa School Districts: Underserved Populations, ICN Classrooms, Internet Locations, and Project Participants

		Chapter 1	Misselle	Limited	Percent Eligible for	, tr	חייים	District			Curriculum or Exemplan
AEA #	Iowa School District	tration District	Enrollment (1)	Proficiency (>25 Students)	Reduced Lunch (2)	Poverty Rate (3)	County (4)	Enroll- ment <600	ICN Classrooms in District (5)	Internet Site (6)	Project Site
12	Akron Westfield				L3		R2		В	×	
12	Anthon-Oto	×			L2	P3		×			
12	Ar-We-Va	×	٠		L3	P2	R2	×			
12	Aurelia						R2	X		×	
12	Battle Creek-Ida Grove	×			L2		R1		• X	×	Э
12	Charter Oak-Ute	×			L2	P2	R2	×	В	×	
12	Cherokee						R2		•	×	
12	Denison	×	M2		L2	P2	<b>Z</b> 2		• X A	X	
12	East Monona	×			L2	P2	R2	X			
12	Eastwood	×			FT	P3		X			
12	Galva-Holstein						R1			×	П
12	Hinton						R2			×	
12	Kingsley-Pierson	×			F3		R2	×		×	
12	Lawton-Bronson					P3		×		×	
12	Le Mars						R2		• ××	×	
12	Maple Valley	×			F7	P2	R2	×	×ו	×	
12	Remsen-Union						R2	×		×	
12	Schleswig	×			F.J	P2	<b>R2</b>	×			
12	Sergeant Bluff-Luton		M2			P3			А	×	
12	Sioux City	X	M1	×	L2	P3			• X X A B	×	
12	West Monona	×			L3	P2	R2			×	
12	Westwood	×	M2			. P3					
12	Whiting	×			ខា	P2	R2	×		×	
12	Willow		M2		L2,		R2	×			
12	Woodbury Central	×				P3				×	

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Iowa School Districts: Underserved Populations, ICN Classrooms, Internet Locations, and Project Participants

			J	/		,			,	4	
		Chapter 1	Minorify	Limited English	Percent Eligible for Free and	County	Rural	District			Curriculum or Exemplary
AEA #	Iowa School District	tration District	Enrollment (1)	Proficiency (>25 Students)	Reduced Lunch (2)	Poverty Rate (3)	County (4)	Enroll- ment <600	ICN Classrooms in District (5)	Internet Site (6)	Project Site (7)
13	Anita	×			L2	P3	RZ	×	В		
13	Atlantic	Χ				P3	72		•		
13	Boyer Valley	×			L2						
13	C and M	X			L2	P3	R2	×	В		
13	Clarinda	X				P3	R2		• X B		
13	Council Bluffs		M1	×	77				<ul><li>XXXBBBB</li></ul>		
13	Elk Horn-Kimballton	×			F13		R2	X	X		
13	Essex	×				P3	R2	×	В		
13	Farragut	×				P3	R1	×	В		
13	Fremont-Mills	×			гз	P3	R1	X	В		
13	Glenwood						R2		•		
13	Griswold	×			ЕЛ	P3	R2		А		
13	Hamburg	×			L2	P3	R1	×			
13	Hancock-Avoca							×	В		
13	Harlan				ខា		R2		•		
13	IKM				L2		R2	×	В		
13	Lewis Central	×			£1				А		
13	Logan-Magnolia				£1	P3	R2		В		
13	Malvern	×			ГЗ		R2	×	В		
13	Missouri Valley				£1	P3	R2		•		
13	Nishna Valley	×			L2		22	×	В		
13	Riverside				[]				В		
13	School for the Deaf								А		
13	Shelby	×			F7		R2	×	В		
13	Shenandoah	×			L3	P3	72		ХВ		
13	Sidney	×			13	P3	R1	×	•		



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	Iowa School Districts: Underserved Popi	ts: Under	served Pop	ulations, IC	N Classroo	ms, inter	net Loci	itions, an	ulations, ICN Classrooms, Internet Locations, and Project Farticipants	cipants	
AEA #	Iowa School District	Chapter 1 Concen- tration District	Minority Enrollment (1)	Limited English Proficiency (>25 Students)	Percent Eligible for Free and Reduced Lunch (2)	County Poverty Rate (3)	Rural County (4)	District Enroll- ment <600	ICN Classrooms in District (5)	Internet Site (6)	Curriculum or Exemplary Project Site
13	13 South Page	×			ខា	P3	R2	×	В		
13	Treynor							×	٨		
13	13 Tri-Center	×							В		
13	Underwood		M2						В		
13	Walnut		,		L3			×	В		
13	13 West Harrison	X			L2	P3	R2	×	В		
13	13 Woodbine	×			L2	P3	R2	×	В		



Iowa School Districts: Underserved Populations, ICN Classrooms, Internet Locations, and Project Participants

		Chapter 1 Concen-	Minority	Limited English	Percent Eligible for Free and	County	Rural	District	J. Composition of the compositio	·	Curriculum or Exemplary
AEA #	Iowa School District	tration District	Enrollment (1)	(>25 Students)	Keancea Lunch (2)	Poverty Rate (3)	County (4)	ment <600	in District (5)	Site (6)	(2)
14	Bedford	×			L2	P2	R1		•	A	
14	Bridgewater-Fontanelle	×			L2	P3	R1	×		A	
14	Central Decatur	×			L2	P1	R2		×		
14	Clarke	×			L2	P2	R2		•		
14	Clearfield	×			L1	P2	R1	X			
14	Corning	×			ខា	P2	R1		ו		
14	Creston	×			77	P2	R2		ו		
14	Diagonal	×			וח	P2	R1	X		A	
14	East Union	×			ויו	P2	R2	X			
14	Grand Valley	×			L1	P2	R1	×			
14	Greenfield	×			F7	P3	R1		•	A	
14	Lamoni	×	M2		L2	P1	R2	×	ו	×	
14	Lenox	×	M2	X	L2	P2	R1	×			
14	Mormon Trail	×			L1	P1	R2	×			ш
14	Mount Ayr	×			L2	P2	R1		•	×	
14	Murray	×			L2	P2	72	×			
14	New Market	×			L2	P2	R1	×			
14	Orient-Macksburg	×			L2	F3	R1	×			
14	Prescott	×			L2	P2	R1	×			
14	Red Oak	×					R2		• X B		
14	Stanton						R2	×			
14	Villisca	×			F.1		22	×	A		

Iowa School Districts: Underserved Populations, ICN Classrooms, Internet Locations, and Project Participants

	Chapter 1 Concen-	Minority	Limited English		County	Rural	District	į		Curriculum or Exemplary
Iowa School District	tration District	Enrollment (1)	Proficiency (>25 Students)	Reduced Lunch (2)	Poverty Rate (3)	County (4)	Enroll- ment <600	ICN Classrooms in District (5)	Internet Site (6)	Project Site (7)
Albia	×			ខា	P2	R2		•	×	
Cardinal	×			L2	P2			В		
Centerville	×			77	P1	R2		• X B	A	
Chariton	×			ខា	P3	R2		ו	А	
Davis County	×			ខា	P1	R2		ו	A	
Eddyville-Blakesburg	×			1.2	P2			Я	Α	
Fairfield	×				P3	R2		х•	Ą	
Fox Valley	×			L1	P2	R1	×	В		
Fremont	×			F7	P3	R2	X	В		
Harmony	×			L2	P2	R1	×			
Keota	×				P3	R1	×			
Lineville-Clio	×				P1	R1	×	. В		
Moravia	×			L2	P1	R2	×	В		
Moulton-Udell	×			L2	P1	<b>K</b> 2	×	В	A	
North Mahaska				F7	P3	R2	X	В		
Oskaloosa				L3	P3	R2		ו	×	
Ottumwa	×	M2		L2	P2			•XXXXXXX	×	
Pekin	×				P3	R1		В		
Russell	×	·		L1	P3	R2	×	В		
Seymour	×			L2	l-J	R1	X	В		
Sigourney	×			L2	F3	R1		•	А	
Tri-County	×			FT	Ed.	R1	X	В		
Van Buren	×			F7	P2	R1		•	A	
Wavne	×			L2	P1	12		•	٧	

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Iowa School Districts: Underserved Populations, ICN Classrooms, Internet Locations, and Project Participants

	10Wa School Districts. Chuciscivea I oparations, 1014 Cassicomis, miterioris, and 110 cct 1 articipants	is. Oliver	do i na i ac	ulationis, 10	IN CIRSSION	אוווס, אוונכנו	זוכו דיסכם	trioxio, axi	מ זיסוברו ז מינוי	cipanto	
AEA		Chapter 1 Concentration	Minority Enrollment	Limited English Proficiency	Percent Eligible for Free and Reduced	County Poverty	Rural	District Enroll-	ICN Classrooms	Internet	Curriculum or Exemplary Project Site
#	Iowa School District	District	(1)	s)	Lunch (2)	Rate (3)	(4)	ment <600	in District (5)		(2)
16	Burlington	×	M1		F7	P3			XXXA	×	
16	16 Central Lee					P3				×	
16	16 Danville					P3		×		×	
16	16 Fort Madison	×	M2			P3			××	×	
16	Keokuk	×	M2		L2	P3			×ו	×	
16	Mediapolis					P3				×	
16	16 Morning Sun		M2		L2		R1	×		×	
16	16 Mount Pleasant	X	M2				R2		XX•	×	
16	16 New London						R2	X		×	
16	16 Waco						R2	X		×	
16	16 Wapello		M2		F7		R1		•	×	
16	16 West Burlington Independent		M2			P3			•	X	
16	16 Winfield-Mt. Union				F3		R2	×		×	

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### Internet Access # Planned 26/96 Access 96/97 Internet Access # Current Ŋ # Current ICN | # Planned ICN Description of Iowa Schools with ICN or Internet Access Access # Total IA Schools Concentrations of limited English proficient students 25-33% of students qualify for free/reduced lunch >33% of students qualify for free/reduced lunch Concentrations of minority students District enrollments <600 students Chapter One concentration sites County poverty rate >20%

96/2/9

College Private

National Guard

State/Federal Agency

AEA

Regent University

Community College

K-12 School

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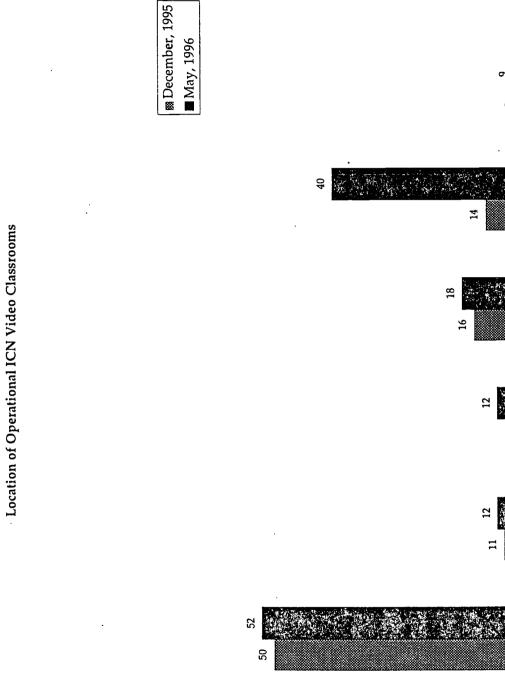
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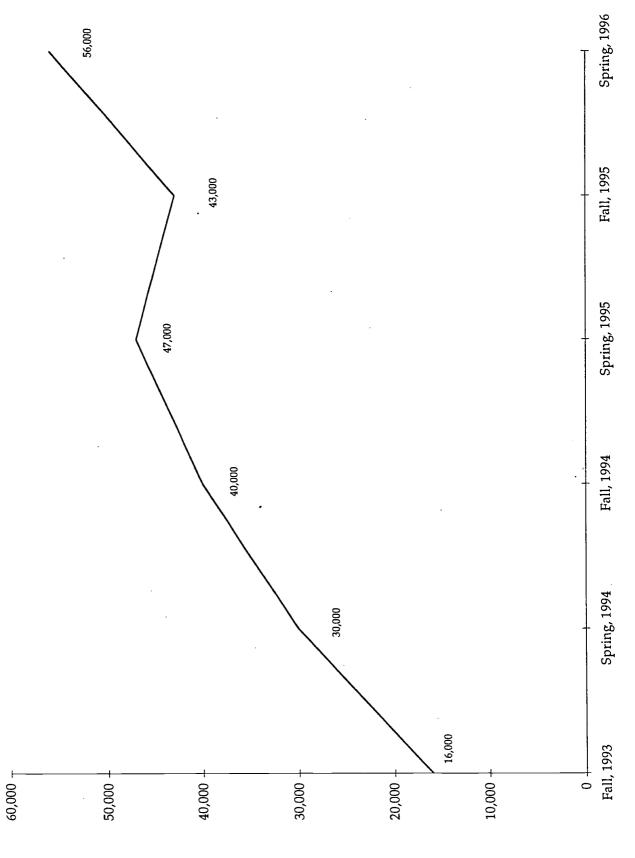
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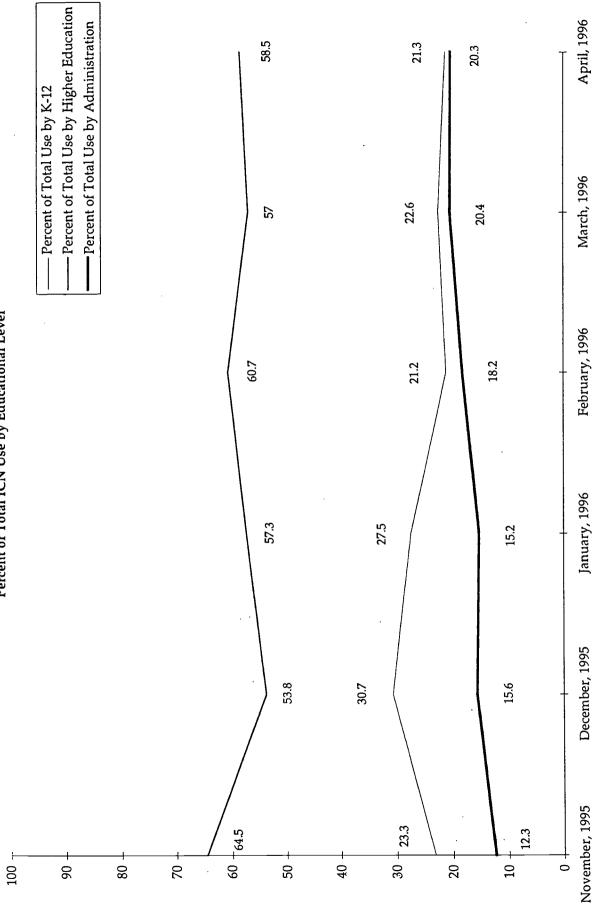
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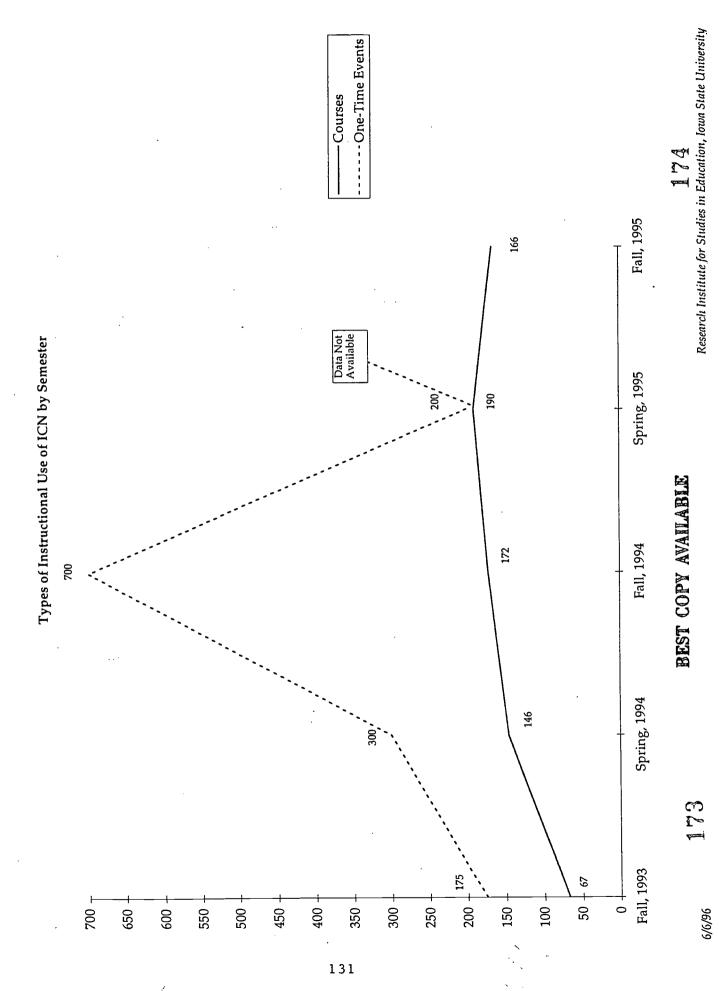
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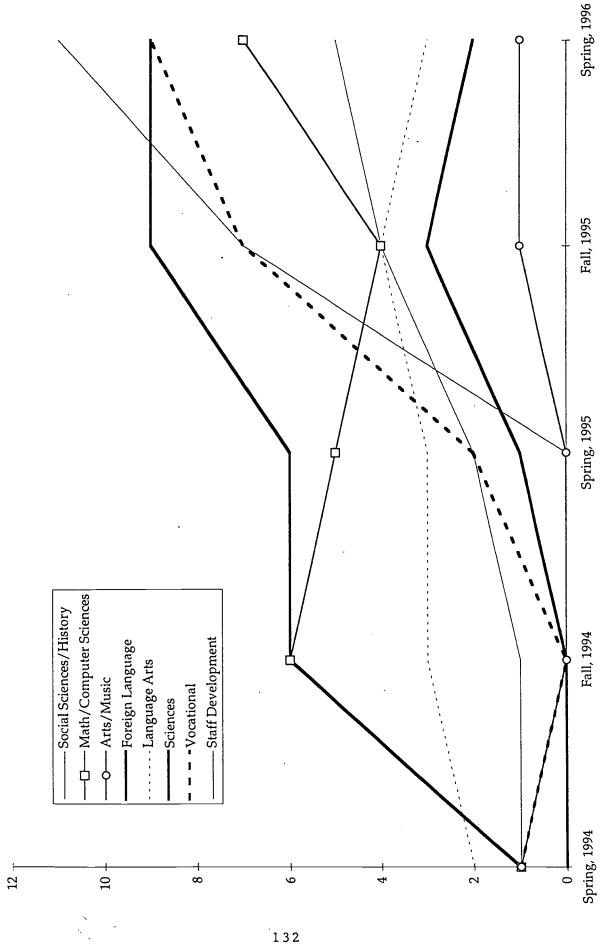




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K-12 Courses on the ICN by Semester

Courses on the ICN	Spring, 1994	Fall, 1994	Spring, 1995	Fall, 1995	Spring, 1996
Social Sciences/History		1	2	4	5
Math/Computer Sciences	1	9	5	4	7
Arts/Music		0	0	1	1
Foreign Language	1	9	9	6	6
English/Literature	2	3	8	4	. 8
Sciences	0	0	1	3	2
Vocational	1	0	2	. 7	6
Staff Development	. 0	0	0	7	11
Total Courses	7	16	19	32	36
Total Staff Development	0	0	0	7	11







## Iowa School Districts Participating in ICN Courses

			0 1			
AEA#	Iowa School District	Spring 1994	Fall 1994	Spring 1995	Fall 1995	Spring 1996
1	Allamakee	0			Λ	O, V, V
-1	Central				0	
1	Decorah					
1	Dubuque					
1	Eastern Allamakee					
1	Edgewood-Colesburg					
1	Fredericksburg					
1	Garnavillo					
1	Guttenburg					
1	Howard-Winneshiek	M, O			S	S, O, V
1	Maquoketa Valley					
1	M-F-L Mar Mac					
1	New Hampton	M, O				Λ
1	North Fayette					
1	North Winneshiek		٠			
1	Oelwein	М, О		0	V, F	O, V, F, V
1	Postville			-		
1	Riceville					
1	South Winneshiek	M, O		0	۷,0	O, V, V
1	Starmont					
1	Turkey Valley					
1	Valley					
1	West Central					
1	West Delaware County	M, O			FA, V, F	O, V, F, V, V
1	Western Dubuque					

Codes: A=All subjects; M=Math/Computer Science; FA=Fine Arts; F=Foreign Language; L=Language Arts/English; S=Science; V=Vocational Education; S=Social Studies; O=Other

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Iowa School Districts Participating in ICN Courses

AEA#	Iowa School District	Spring 1994	Fall 1994	Spring 1995	Fall 1995	Spring 1996
2	Belmond-Klemme			•	•	
2	Buffalo Center-Rake-Lakota					
2	Cal					
2	Charles City					O'SS
2	Clear Lake					•
2	Corwith-Wesley					
2	Forest City		ഥ	Ħ	F, F	SS, M, F, F
2	Garner-Hayfield				F, E	F, E
2	Greene					
2	Hampton-Dumont				Λ	
2	Lake Mills					
2	Mason City				V, V, V, E	SS, M, V, E
2	Meservey-Thorton					
2	Nora Springs-Rock Falls					
2	North Central					
2	Northwood-Kensett			·	F	SS, F
2	Osage				F	SS, F
2	Rockwell-Swaledale					
2	Rudd-Rockford-Marble Rock					
2	Sheffield-Chapin					
2	St. Ansgar					
2	Thompson					
2	Ventura					
2	West Hancock					
2	Woden-Crystal Lake					

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Iowa School Districts Participating in ICN Courses

			7			
AEA#	Iowa School District	Spring 1994	Fall 1994	Spring 1995	Fall 1995	Spring 1996
3	Algona					0,0
3	Armstrong-Ringsted					
3	Burt					
3	Clay Central/Everly					
3	Emmetsburg				M	M, O
3	Estherville					0'0
3	Graettinger					
3	Harris-Lake Park					
3	Lu Verne					
3	North Kossuth					
3	Okoboji					
3	Ruthven-Ayrshire					
3	Sentral					
3	South Clay					
3	Spencer					0
3	Spirit Lake	Ħ	ц	Ħ	щ	F,0
3	Terril					
3	Titonka Consolidated					
3	West Bend-Mallard					

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### Spring 1996 SS Fall 1995 Σ ဗ ഥ Iowa School Districts Participating in ICN Courses Spring 1995 **SS**, **SS** E, E Fall 1994 田、田 Σ Spring 1994 Marcus-Meriden-Cleghorn Iowa School District Hartley-Melvin-Sanborn Sibley-Ocheyedan Moc-Floyd Valley South O'Brien Central Lyon Boyden-Hull Sioux Center Rock Valley West Lyon West Sioux Little Rock Sheldon George AEA# 4 4 4 4 4 4 4 4



## Iowa School Districts Participating in ICN Courses

•						
AEA#	Iowa School District	Spring 1994	Fall 1994	Spring 1995	Fall 1995	Spring 1996
2	Albert City-Truesdale			•		
5	Alta					
5	Clarion-Goldfield					
5	Dows					
5	Eagle Grove					
5	East Greene					:
5	Fort Dodge					
5	Gilmore City-Bradgate					
2	Humboldt					
5	Jefferson-Scranton		M, SS	M	M, SS	M, M
5	Lake View-Auburn					
2	Laurens-Marathon					
2	Manson-Northwest Webster					
2	Newell-Fonda					
2	Northeast Hamilton					
5	Odebolt-Arthur					
2	Paton-Churdan					
5	Pocahontas Area					
5	Pomeroy-Palmer					
2	Prairie Valley					
5	Rockwell City-Lytton					
5	Sac					
5	Schaller-Crestland					
5	Sioux Central 、					
5	South Hamilton					
5	Southeast Webster					

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AEA#	Iowa School District	Spring 1994	Fall 1994	Spring 1995	Fall 1995	Spring 1996
5	Southern Cal					
5	Storm Lake					
5	Stratford	•				
5	Twin Rivers					
5	Wall Lake					
5	Webster City					

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# Iowa School Districts Participating in ICN Courses

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AEA#	Iowa School District	Spring 1994	Fall 1994	Spring 1995	Fall 1995	Spring 1996
9	Ackley-Geneva					
9	Alden					
9	BCLUW					
9	Brooklyn-Guernsey-Malcolm					·
9	East Marshall					
9	Eldora-New Providence					
9	Gladbrook					
9	GMG					
9	Grinnell-Newburg					
9	Hubbard-Radcliffe					
9	Iowa Falls					
9	Marshalltown	F	F	. <b>ப</b>	SS, F	F
9	Montezuma					
9	South Tama County		M	W	SS	M
9	Wellsburg-Steamboat Rock					
9	West Marshall					

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Iowa School Districts Participating in ICN Courses

AEA #         Iowa School District         Spring 1994         Fall 1994         Spring 1995         Fall 1995         Spring 1995           7         A Allison-Bristow         FA         ————————————————————————————————————		THE RESERVE THE PARTY OF THE PA					
Iowa School District         Spring 1994         Fall 1994         Spring 1995         Fall 1995           Aplington         Cedar Falls         FA         Page 11995           Card Falls         FA         Page 11995           Cardar Falls         FA         Page 11995           Cardar Falls         FA         Page 11995           Cardar Falls         FA         Page 11995           Denver         Page 11995         Page 11995           Danver         Page 11995         Page 1							
Allison-Bristow         Allison           Applington         FA           Cedar Falls         FA           Clarksville         Colarksville           Dunkerton         F           Dunkerton         F           Bast Buchanan         F           Grundy Center         F           Hudson         F           Independence         F           Janceville Consolidated         F           Janceville Consolidated         F           Janceville Consolidated         F           Jesup         F           New Hartford         North Tama County           North Tama County         Parkersburg           Plainfield         Reinbeck           Summer         Tripoli           Union         Union           Waterloo         Waterloo           Waverly-Shell Rock         F, V	AEA#	Iowa School District	Spring 1994	Fall 1994	Spring 1995	· Fall 1995	Spring 1996
Aplington         FA           Cedar Falls         FA           Clarksville         Penver           Daiker         Penver           Daikerton         Perver           Daikerton         Perver           East Buchanan         Perver           Grandy Center         Perver           Hudson         Perver           Independence         Perver           Janesville Consolidated         Perver           Jesup         Perver           North Tama         North           North Tama County         Parkersburg           Palainfield         Parkersburg           Reinbeck         Sumner           Tripoli         Tripoli           Union         Waterloo           Waterloo         F, V           Waverly-Shell Rock         F, V	7	Allison-Bristow					
Cedar Falls         FA         PA           Clarksville         Penver         Penver           Denver         Denver         Penver           Dike         Penver         Perver           Dunkerton         Perver         Perver           Bast Bucharan         Perver         Perver           Grundy Center         Perver         Perver           Independence         Perver         Perver           Janceville Consolidated         Perver         Perver           Janceville Consolidated         Perver         Perver           Janceville Consolidated         Perver         Perver           North Tama County         Perver         Perver           Parkersburg         Perver         Perver           Parkersburg         Perver         Perver           Reinbeck         Perver         Perver           Sumner         Perver         Perver           Tripoli         Perver         Perver           Uniner         Perver         Perver           Tripoli         Perver         Perver           Uniner         Perver         Perver           Value         Perver         Perver           Value	7	Aplington					
Clarksville         Denver           Denver         Clarksville           Duikerton         East Buchanan           East Buchanan         F           Grundy Center         F           Hudson         F           Independence         F         F           Janesville Consolidated         F         F           Jesup         New Hartford         E           New Hartford         New Hartford         E           North Tama County         Parkersburg         E           Parkersburg         Parkersburg         E           Parkersburg         E         E           Painfield         Reinbeck         E           Sumner         Tripoli         E           Union         Waterloo         E           Waterloo         Waterloo         E	7	Cedar Falls	FA				
Denver         Denver           Dike         Conkerton           Dunkerton         East Buchanan           Grundy Center         F           Hudson         F           Independence         F           Janesville Consolidated         F           Jesup         F           New Hartford         C           Noth Tama County         C           Parkersburg         C           Painfield         C           Reinbeck         C           Sumner         C           Tripoli         C           Union         Waterloo           Waterloo         K,V           Waverly-Shell Rock         C	7	Clarksville					
Dike           Dunkerton         East Buchanan           Grundy Center         F           Hudson         F         F           Independence         F         F           Janesville Consolidated         F         F           Jesup         North Tama County         F         F           North Tama County         Parkersburg         C         C           Painfield         Reinbeck         C         C           Sumner         Tripoli         C         C           Union         Wapsie Valley         F, V           Waterloo         Waterloo         F, V           Waverly-Shell Rock         F, V	7	Denver					
Dunkerton         Dunkerton           East Buchanan         F           Grundy Center         F           Hudson         F           Independence         F           Janesville Consolidated         F           Jesup         F           Nashua         F           North Tama County         F           Parkersburg         F           Painfield         F           Reinbeck         F           Sumner         F           Tripoli         Union           Wapsie Valley         F, V           Waterloo         E, V           Waverly-Shell Rock         F, V	7	Dike					
East Buchanan         F         F           Grundy Center         F         F           Hudson         F         F           Independence         F         F           Janesville Consolidated         F         F           Jesup         F         F           Nashua         Now Hartford         F           North Tama County         F         F           Painfield         F         F           Plainfield         F         F           Reinbeck         Sumner         F           Sumner         Tripoli         F           Union         Wapsie Valley         F,V           Waterloo         F,V         F,V	7	Dunkerton					
Grundy Center         F         F           Hudson         F         F           Independence         F         F           Janesville Consolidated         F         F           Jesup         F         F           Jesup         F         F           Nashua         North Tama County         F           North Tama County         F         F           Parkersburg         F         F           Painfield         Keinbeck         F           Sumner         S         F           Tripoli         T         F           Union         Wapsie Valley         F, V           Waterloo         F, V         F           Waverly-Shell Rock         F, V         F	7	East Buchanan					
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Independence         F         F           Janesville Consolidated         F         F           Jesup         C         C         C           Nashua         North Tama County         C         C           North Tama County         C         C         C           Parkersburg         C         C         C           Plainfield         C         C         C           Reinbeck         Sumner         C         C         C           Sumner         Tripoli         C         C         C         C           Union         Wapsie Valley         C         C         C         C         C           Waterloo         Waterloo         F, V         C	7	Hudson					
Janesville Consolidated         Janesville Consolidated           Jesup         Nashua           New Hartford         Morth Tama County           Parkersburg         Morth Tama County           Plainfield         Meinbeck           Reinbeck         Meinpeck           Sumner         Morth           Tripoli         Mapsie Valley           Wapsie Valley         F, V           Waverly-Shell Rock         F, V	7	Independence		뵤	Ħ	Ħ	Ŧ
Jesup         Jesup         6           Nashua         New Hartford         1           North Tama County         1         1           Parkersburg         1         1           Plainfield         1         1           Reinbeck         1         1           Sumner         2         1           Tripoli         1         1           Union         1         1           Wapsie Valley         1         1           Waterloo         1         1           Waverly-Shell Rock         1         1	7	Janesville Consolidated					
Nashua         New Hartford         American devents         <	7	Jesup					
New Hartford         North Tama County	7	Nashua					
North Tama County         Morth Tama County           Parkersburg         Plainfield           Reinbeck         Common County           Sumner         Common County           Tripoli         Common County           Union         Wapsie Valley           Waterloo         F, V           Waverly-Shell Rock         F, V	7	New Hartford					
Parkersburg         Parkersburg           Plainfield         Common to the characters of	7	North Tama County					
Plainfield         Reinbeck         Common Summer         Common Summer <td>7</td> <td>Parkersburg</td> <td></td> <td></td> <td></td> <td></td> <td></td>	7	Parkersburg					
Reinbeck         Reinbeck           Summer         Tripoli           Tripoli         Wapsie Valley           Waterloo         F, V           Waverly-Shell Rock         F, V	7	Plainfield					
Summer         Tripoli           Union         Wapsie Valley           Waterloo         F, V           Waverly-Shell Rock         F, V	7	Reinbeck					
Tripoli         Union         F, V           Waterloo         Waverly-Shell Rock         F, V	7	Summer					
Union         Wapsie Valley         F, V           Waterloo         Waverly-Shell Rock	7	Tripoli					
Wapsie Valley         F, V           Waterloo         F, V           Waverly-Shell Rock         F, V	7	Union					
Waterloo         F, V           Waverly-Shell Rock         F, V	7	Wapsie Valley					
	7	Waterloo				F, V	F
	7	Waverly-Shell Rock					

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Iowa School Districts Participating in ICN Courses

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		AEA # Iowa School District Spriv	Andrew	Bellevue	Bennett	Bettendorf	Calamus/Wheatland	Camanche	Central Clinton	Clinton	Columbus	Davenport	Delwood	Durant	East Central	Louisa-Muscatine	Maquoketa	Muscatine	North Scott	Northeast	Pleasant Valley	Preston	West Liberty	Wilton

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Iowa School Districts Participating in ICN Courses

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10	Alburnett			-		
10	Anamosa					
10	Belle Plaine					
10	Benton					
10	Cedar Rapids				V, V, V	
10	Center Point-Urbana					
10	Central City			-		
10	Clear Creek-Amana					
10	College					
10	Deep River-Millersburg					
10	English Valleys					
10	A-T-N		,			
10	Highland					
10	IA Braille & Sight School					
10	Iowa City					FA
10	IA Mennonite					
10	Iowa Valley					
10	Linn-Mar					
10	Lisbon					
10	Lone Tree					
10	Marion Independent					
10	Mid-Prairie					
10	Midland					
10	Monticello					
10	Mount Vernon				•	
10	North Cedar					

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# Iowa School Districts Participating in ICN Courses

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AEA#	Iowa School District	Spring 1994	Fall 1994	Spring 1995	Fall 1995	Spring 1996
10	North Linn			•		
10	Olin Consolidated					
10	Solon					
10	Springville					
10	Tipton					
10	Vinton-Shellsburg			M		
10	Washington					0
10	West Branch					
10	Williamsburg					

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Iowa School Districts Participating in ICN Courses

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AEA#	Iowa School District	Spring 1994	Fall 1994	Spring 1995	Fall 1995	Spring 1996
11	Adair-Casey				•	
11	Adel-DeSoto-Minburn					0
11	Ames	SS				0
11	Ankeny					Λ
11	Audubon					
11	Ballard					
11	Baxter					
11	Bondurant-Farrar					
11	Boone					
11	Carlisle					
11	Carroll					
11	Colfax-Mingo					
11	Collins-Maxwell					
11	Colo-Nesco					
11	Coon Rapids-Bayard					
11	Correctional Facility					
11	Dallas Center-Grimes					
11	Des Moines Independent				SS	0
11	Dexfield					
11	Earlham					
11	Exira					
11	Gilbert					
11	Glidden-Ralston					
11	Grand					
11	Guthrie Center					M
11	Indianola					

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Iowa School Districts Participating in ICN Courses

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AEA#	Iowa School District	Spring 1994	Fall 1994	Spring 1995	Fall 1995	Spring 1996
11	Interstate 35			-		
11	Johnston	FA			V, V, V	V, V, V, O, O, O
11	Knoxville					
11	Lynnville-Sully					
11	Madrid					
11	Manning			-		
11	Martensdale-St.Marys					
11	Melcher-Dallas					
11	Nevada					
11	Newton				Ħ	F, O
11	North Polk					
11	Norwalk					
11	Ogden					
11	Panorama					
11	PCM					
11	Pella					0
11	Perry					
11	Pleasantville					
11	Roland-Story					
11	Saydel Consolidated					
11	Southeast Polk					
11	Southeast Warren					
11	Stuart-Menlo			-		
11	Twin Cedars					
11	United					
11	Urbandale					





# Iowa School Districts Participating in ICN Courses

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AEA#	Iowa School District	Spring 1994	Fall 1994	Spring 1995	Fall 1995	Spring 1996
11	Van Meter					
11	Waukee					
11	11 West Des Moines					
11	Winterset					Ο'Λ
111	Woodward-Granger					

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Iowa School Districts Participating in ICN Courses

AEA#	Iowa School District	Spring 1994	Fall 1994	Spring 1995	Fall 1995	Spring 1996
12	Akron Westfield			-		
12	Anthon-Oto					
12	Ar-We-Va					
12	Aurelia					
12	Battle Creek-Ida Grove				F	F
12	Charter Oak-Ute					
12	Cherokee	M		,	M, S	Λ
12	Denison					Λ
12	East Monona					
12	Eastwood					
12	Galva-Holstein					
12	Hinton					
12	Kingsley-Pierson					
12	Lawton-Bronson					
12	Le Mars	Е	E	S, E	. S, F	S, F
12	Maple Valley	Ξ	M	M, S	S, F	S, F
12	Remsen-Union					
12	Schleswig					
12	Sergeant Bluff-Luton					
12	Sioux City				Λ	SS
12	West Monona					
12	Westwood					
12	Whiting					
12	Willow					
12	Woodbury Central					

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Iowa School Districts Participating in ICN Courses

AEA#	Iowa School District	Spring 1994	Fall 1994	Spring 1995	Fall 1995	Spring 1996
13	Anita					
13	Atlantic		M		M, E	M, M, M
13	Boyer Valley					
13	C and M					
13	Clarinda				Э	
13	Council Bluffs				V, E	M, E
13	Elk Horn-Kimballton					
13	Essex					
13	Farragut					
13	Fremont-Mills					
13	Glenwood	SS	M		M, V, V, E	M, M, M
13	Griswold					
13	Hamburg					
13	Hancock-Avoca					
13	Harlan				E	E
13	IKM					
13	Lewis Central					
13	Logan-Magnolia					
13	Malvern					
13	Missouri Valley				F, F	F, F
13	Nishna Valley					
13	Riverside				•	
13	School for the Deaf					
13	Shelby					
13	Shenandoah					
13	Sidney				Ξ	

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# Iowa School Districts Participating in ICN Courses

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AEA#	Iowa School District	Spring 1994	Fall 1994	Spring 1995	Fall 1995	Spring 1996
13	South Page			•		
13	Treynor					
13	Tri-Center					
13	Underwood					
13	Walnut					
13	West Harrison					
13	Woodbine					

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Iowa School Districts Participating in ICN Courses

AEA # Iowa School District  14 Bedford  14 Bridgewater-Fontanelle  14 Central Decatur  14 Clarke  14 Clearfield  14 Creston  14 Diagonal  14 East Union  14 Greenfield  14 Greenfield  14 Hount Ayr  14 Lamoni  15 Mount Ayr  16 Murray  17 New Market	.t Spring 1994				
Bedfor Bridge Centra Clarke Clearfi Cornin Cornin Cresto Diagor East Ul Grand Greenf Lamon Lenox Mount Mount New M					
		94 Fall 1994	Spring 1995	Fall 1995	Spring 1996
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				F, E	ц
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14 Orient-Macksburg					
14 Prescott					
14 Red Oak				ш	
14 Stanton					
14 Villisca					

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Iowa School Districts Participating in ICN Courses

AEA#	Iowa School District	Spring 1994	Fall 1994	Spring 1995	Fall 1995	Spring 1996
15	Albia		M, F	M, F	F	SS, O, O, F
15	Cardinal					
15	Centerville				M	SS, O, O
15	Chariton	Ξ			SS	0'0'ss
15	Davis County		ц	F	SS	Λ'Ο
15	Eddyville-Blakesburg					
15	Fairfield					
15	Fox Valley					
15	Fremont					
15	Harmony					
15	Keota					
15	Lineville-Clio					
15	Moravia					
15	Moulton-Udell					
15	North Mahaska					•
15	Oskaloosa				SS, O, M	O 'O 'SS
15	Ottumwa				•	0,0
15	Pekin					
15	Russell					
15	Seymour					
15	Sigourney			Ε	ш	O, E
15	Tri-County					
15	Van Buren	E			Э	SS, SS, O, O, E
15	Wavne					

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# Appendix E:

# Training and Technical Support

Internet Help Desk Training Evaluation Summary Room Manager Training Evaluation Summary Staff Development Participant Survey LAN/WAN Training Evaluation Summary Networking Fundamentals for Educators



# Internet Help Desk Training Evaluation Summary February 20, 1996

Participants: Approximately 15 sites were on-line for this session. Several sites had no one attending and many had only one participant. The instructor commented that there were approximately 25 individuals attending. About half of the participants identified themselves as media directors. The other half included individuals who worked in the technology section of the AEA, secretaries, and switch board operators.

Data Collection: Two evaluators from the Research Institute for Studies in Education (RISE) attended the help desk training session. At the close of the session, participants were asked to respond to the following questions and a record was made of their responses.

- 1. What did you like best about today's training session?
- 2. If this training session was to be offered again, what suggestions do you have for improving both the content and the delivery of this training?

### What they liked best:

- 1. Organization: Receiving materials ahead of time was identified as a big plus. Goals and objectives were identified at the beginning of the session.
- 2. Content: Everyone felt that the material presented was excellent. One commented that it wasn't what he was expecting although it "was so good that I would recommend it for all" individuals working with the public. This opinion was backed by another individual who felt it would be helpful even if you weren't on the help desk.
- 3. Presenter: Participants felt the presenter made the session easy to understand and enjoyable. She was very knowledgeable and supplemented the content with personal examples. Many opportunities for participation were built into the presentation. Many felt the pacing was good. All felt she did an outstanding job.
- 4. Delivery system: All felt using the ICN for the training session worked well.

### Suggestions for change:

- Expectations: Many participants suggested that more detail about the topics to be
  covered be included in the memo that was sent to media directors about this session.
  Though they came expecting something specific to setting up an Internet help desk, the
  participants felt the topics covered were applicable to all individuals working in the
  area of support.
- 2. Technical: Suggestions were made to use computer presentations instead of overheads and to avoid the use of transparencies. Another suggestion was for the presenter to use the zoom when using the overhead camera as many overheads were too small to read.
- 3. Content: The suggestion was made to branch out into all areas of technical support and not just limit the sessions to Internet help desk.

### Observer's comments:

Participants enjoyed the training session and appreciated the content even though there were differences between expectations and the actual content. The presenter appeared to be experienced in teaching on an interactive television system. She was very comfortable with the technology. A brief practice time prior to the session would allow the presenter to become familiar with the unique features of the ICN setup, such as use of the touch screen to view remote sites and the zoom control to enlarge overheads. A brief practice session for the participants in using the microphones would allow them to become more comfortable with the technology.



Research Institute for Studies in Education, Iowa State University

### Room Manager Training Evaluation Summary January to May 1996

As of May 15, 1996, three five-hour room manager training sessions had been held on-site at three AEAs with a total of 48 participants including site monitors, media specialists, and administrators. Training consisted of lecture, discussion, and hands-on practice. Topics included technical and operational information, room basics, and troubleshooting. Participants were asked to complete a short survey at the conclusion of the training. Their responses are summarized below.

Participant Information:	Number of Responses
Position	10
Secretary/Site Monitor	10 7
Technology Director/Media Specialist	
Administrator	6
Custodian/Maintenance	2
Curriculum Director	1
Teacher	1
No Response	21
Level	21
District	21
High School	16
AEA	6
Middle School/High School	3
Elementary School	1
Middle School	1
Gender	24
Male	24
Female	24
What they liked best:	
Overall quality of workshop	11
Quality and organization of handouts	7
Seeing and working with equipment	7
Troubleshooting session	7
Presentation well organized, clear, concise	6
Allowed for sharing of experiences	3
Offered realistic solutions	3
Size of group	. 3
Variety and knowledge of presenters	3
Pacing of presentation	2
Working with FoxPro	2
Allowed for questions	1
Informal	1
Monitoring information	1
Suggestions for improvement	
Suggestions for improvement:	2
Combine troubleshooting with more hands-on Break up troubleshooting segment into shorter sessions	1
	1
Demonstrate basic computer and FAX use on the ICN	1
Discuss site monitor problems and other non-technical things	
Include PowerPoint and other programs	nole 1
Split scheduling/contact people and technical information peo	bhie i



# Staff Development Participant Survey

Name of Session:	ICN Site Manager's Workshop
Date of Session:	Location:
Part I Demograp	phic Information
1. Gender	Male Female
2. District (Institution	on) you represent:
3. Level:	Elementary Middle School High School Community College College/University
4. If you teach plea	se tell us what subject/content area:
Part II Session 1	Evaluation
	ou liked best about the content of this session.
HANDOUTS  AND EFF  TIME A  2. List your sugges	WERE WELL-ORGANIZED, APPROPRIATE,  FECTIVE, QUESTIONS WERE ALLOWED AT AN  END ANSWERED IMMEDIATELY,  stions to help us improve the content of this session.
	LUE ANY AT THE TIME.
	you liked best about using the ICN for this session.
	s to help us make our use of the ICN more effective.  Any AT THIS TIME.



### LAN/WAN Training Evaluation Summary May 13 - 14, 1996

Participants: Approximately thirty participants attended the training session on local area and wide area networks (LANs and WANs). Seventeen of the participants were from AEAs, seven from LEAs, and six represented IPTV.

Content: The two-day workshop met from 8:00am to 5:00pm each day. Topics presented included basic network terminology, cabling, ethernet, network design, and intranets. Time was allowed for some hands-on application.

**Data Collection:** Participants were asked to complete a survey consisting of three parts: participant information, ten 5-point Likert scale questions on organization and content of the workshop, and three open ended questions related to improving the training workshop. Twenty-seven surveys were returned.

### Participant Information:

•	
Position	
Media/Technology Specialist	10
Computer Specialist	4
Consultant	4
Teacher	3
Engineer	2
AEA Telecommunications	1
No Response	3
Degree	
Masters	13
Associates	3
Bachelors	3
Other	4
No response	4
Technology Experience	
Miscellaneous	10
Computers	5
LANs/WANs	4
Engineering	1
ICN Equipment	1
Special Education	1
<b>4</b>	



6/7/96

		% of par	ticipants giving	a rating of:
Rating Scale Questions:	<u>Mean</u>	1-2	_ 3	4-5
Length of Session	2.93	25.9	51.9	22.2
1=too short				
5=too long				
Easy/hard to follow	4.22	0.0	22.2	77.7
1=hard to follow				
5=easy to follow				
Assumption of prior knowledge	3.22	3.7	<i>7</i> 7.8	18.5
1=assumed too little				
5=assumed to much				
Improved understanding	4.48	0.0	14.8	85.2
1=left me confused				
5=improved my understanding				
Confidence building	3.22	25.9	25.9	48.1
1=left me unsure as a trainer				
5=left me confident as a trainer				
Trainer	4.56	0.0	11.1	88.9
1=ineffective				
5=effective				
Relevancy	3.59	11.1	33.3	55.5
1=too much was irrelevant				
5=exactly what I needed				
Time for questions and interaction	4.15	14.8	3.7	81.4
1=allowed no time				
5=allowed enough time				
Provided help with my situation	3.39	14.8	33.3	48.1
1=no help				
5=gave specific helps				
Materials	4.12	3.7	18.5	74.0
1=ineffective				
5=effective				

### Summary of Open-Ended Questions:

1. If it were up to me, I'd remove the training on..

Only two individuals responded to this question. Both suggested the information on Apple/Mac be removed. "Too much about MACs."

### 2. The parts I liked best were...

Eleven individuals liked the basic knowledge presented. They liked "understanding the rules" and seeing how the "components fit together." Six individuals felt the "humor, knowledge, and experience" of the instructor were the best part of the workshop.

Others commented on the quality of the manuals (3), the section on design (2), the opportunity for questions (1), and the applicability to certain situations (1).

### 3. I would improve the training by...

Three individuals felt it would be helpful to divide "participants into groups with different levels of knowledge."

Others felt that including more hands-on or providing "more visual examples" would improve the training (3).

A desire for an increase in time and depth was expressed by three individuals.



6/7/96

Research Institute for Studies in Education, Iowa State University

# **Networking Fundamentals For Educators**

Instructions

These questions have been designed to help JDL Technologies improve its Networking Fundamentals trainthe-trainer course. We will use your comments to help us do that so please tell us exactly what you think about the Networking Fundamentals course. Don't put your name on this survey form.

. Participant information: Professional training/degrees	- <del></del>					
Technology experience						
Positions held in technology				•		
•					/	
2. Would you have liked the course to ha	ave gone	furth	er?	<u>レ</u> Y	es/	No
If you answered yes, what additional t	opics wo	uld y	ou lik	e to	cove	er?
JUST NEFT MORE TY	me TO	Di	<u> </u>	<u> کې د</u>	ודי.	YE ISSUES -
INFORMATION	1185	8,0	ام ع	1 19-1-		
- NFEEMAT FOR	<u> </u>	دمــد				
•						6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
3. Please place a check on the line which	h represe	ents t	oest l	how	you 1	feel about the following statement:
•						
The Networking Fundamentals C	ourse: (c	heck	one	pox	on e	ach line)
			Ø			Was too short
Was too long	_					Was hard to follow
Was easy to follow	Ø. D		<b>臧</b>			Assumed too little prior knowledge
Assumed too much prior knowledge	Ø					Has left me confused
Has improved my understanding Left me confident as a trainer						Left me unsure as a trainer
Trainer was effective	Ž				<u> </u>	Trainer was ineffective
Emphasized exactly what I needed	$\hat{\Box}$	Ø				Emphasized too much that was
Emphasized exactly what theeded		~	_			irrelevant to me
Allowed enough time for questions				赵		Allowed no time for questions
and interaction				•		or interaction
Gave me specific helps with		XI.				Gave me no help with my
my situation		. •				situation
Used effective materials	赵					Used ineffective materials
			_		_	••
						•
4. If it were up to me, I'd remove the tra	ainina on	<u>.</u>		WAS	JE	er 600g
4. If it were up to me, i'd remove the tra	anning on.	<u>~</u>				
5. The parts I liked best were	ZYAPHOR	25_				
<b>3.</b>						
		ſ				$\langle \hat{\Omega} \rangle$
6. I would improve the training by	NEED	<u>_lo</u>	76E	<u>~_</u>	77	THE YERROD
-						_
		·				



# Appendix F:

# Information Systems

IOWA Database Home Page

**IOWA** Database Flier

Chart: IOWA Database Average Daily Number of

Files Transmitted

Chart: IOWA Database Total Number of Files

Transmitted by Month

Chart: IOWA Database Monthly File Transfers

by Client Domain

Summary of Project Sponsored Instructional

Activities Offered Over the ICN

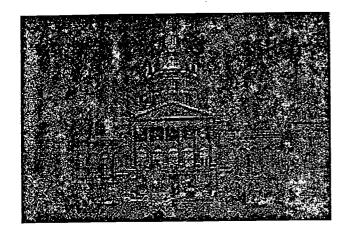
Table: Information About Project Sponsored Instructional Activities Offered Over the ICN

Distance Learning Session Evaluation Questions

Your Internet Connection Flier



# **IOWA** Database



### NEW!

PBS Series: Life on the Internet
Showcase on Technology in Iowa Schools
1996 National Education Summit
Iowa Technology-Based Curriculum Project Grants Awarded
Searchable Listing of Scheduled Classes on the ICN
Educational Opportunities on the ICN | Invitation to Participate
Clickable Map of Operational ICN Sites

Iowa Educational Technology Training Institute Schedule
ThinkQuest Internet Contest
ElectionLine
Download the ICN Scheduling Program Daily Update
ICN Part 3 Plan Updated 2/26/96

- Star Schools Project
- Iowa Communications Network
- Educational Opportunities on the ICN
- Iowa Department of Education
- Area Education Agencies (AEAs)
- State Professional Education Organizations
- State and Regional Newsletters
- World of Education
- Links to other State Agency Home Pages
- FINE link
- New Iowa Schools Development Corporation (NISDC)
- North Central Regional Educational Laboratory <u>PATHWAYS</u>
- Search the World Wide Web with Web Crawler
- Yahoo Web Index

webmaster@iptv.org





# http://www.iptw.org/iowoidatabase/

# Clickable ICN Map

Clickeon a merged area to see ICN site information including address contact\person,\room=layout,\ and-multimedia capabilities

# ich Educational Opportunities

Look at examples of unique and successful ICN uses.

# Searchable Listing of Scheduled Classes

Examine what's happening on the ICN by doing a search of scheduled classes by subject, class title and grade level.

## lowd Educational Technology Training Institute

(IETTI) Schedule

#R203F50001-95.~

See schedule of offerings including ICN Workshops, ICN and Site Managers Workshops, and Powerpoint Workshops.

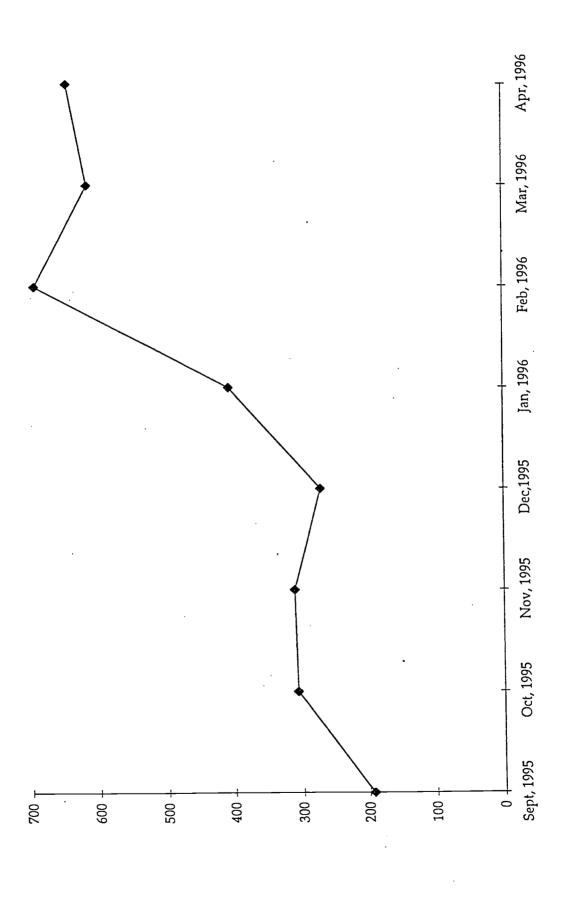
## New-World of Education" Links

Check-out-some-other-neat-world\ wide web servers relating to education

IOWA Database is housed-at-lowa Public with funds DE Star Grant Program

**BEST COPY AVAILAB** 

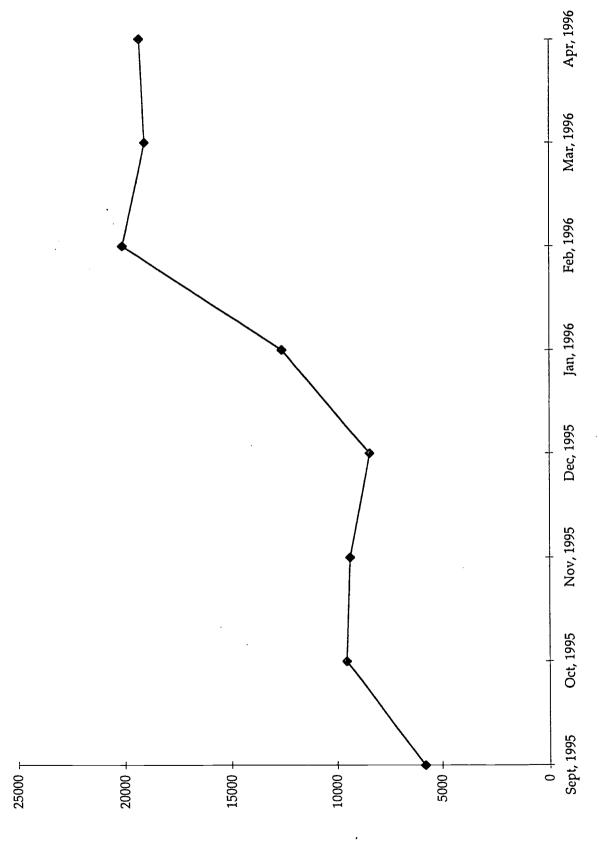
Television and maintained by the members of the Distance Learning and Communications -Technology staffs



96/2/9

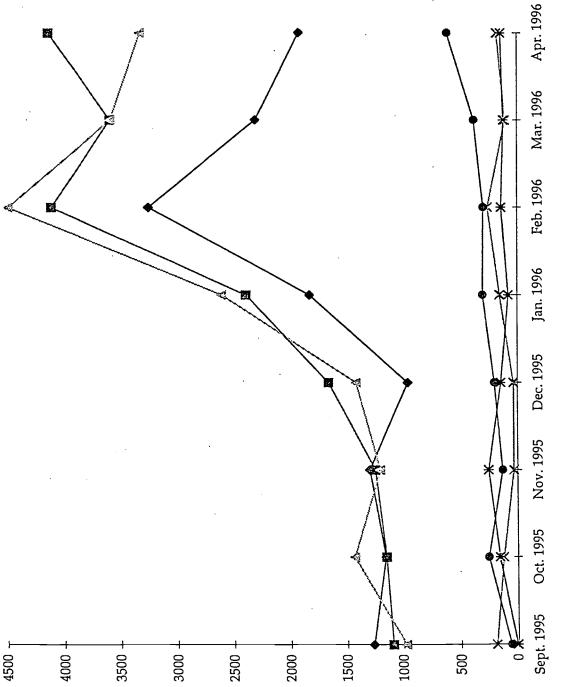








IOWA Database Monthly File Transfers by Client Domain



23



# Summary of Project Sponsored Instructional Activities Offered Over The ICN

- 1. Pet Care: Session presented by a veterinarian on the role of the veterinarian and looking after pets.
- 2. Rent-a-Teacher: Session presented by the Animal Rescue League of Iowa.
- Celebrating the Magic of Music: Three sessions presented by the Pioneer String Quartet of the Des Moines Symphony Orchestra. Sessions included Mozart's Friends, Colors of Music and Worlds of Music.
- 4. Devonian Fossils: A collaborative learning experience on the subject of micro fossils from the Rockford Quarry. Three schools were involved: John Adams Middle School, Mason City; Rockwell-Swaledale Elementary School, and Rockwell-Swaledale High School. The experience included: an ICN presentation by high school students, a visit to Rockford Quarry, and an ICN presentation by elementary students. Both student groups used a variety of media for their presentations including video, computer, fossils, photographs, and video microscope.
- 5. Future Sessions Planned
  - ICN virtual field trips
  - Rent-a-Teacher Teacher workshop
  - Careers and Blue Ice Presentations
  - Repeat of Celebrating the Magic of Music sessions

Analysis of evaluation surveys for these events is not yet complete.



Information About Project Sponsored Instructional Activities Offered Over the ICN

Event	# ICN Sites	# Student Participants	Grade Level
Pet care	9	120	2-5
Rent a Teacher	ស	100	K-6
Mozart's Friends		06	
Colors of Music	4	80	
Worlds of Music	4	75	•
Devonian Fossils	ហ	186	5-12

96/9/9



## Distrance Learning session

Evaluation Questions - Student copy

Session attended				<u> </u>			
Date	<u>,                                     </u>	<del>-                                    </del>	•				
Teachers may ask	their s	tuder	its to s	write their	responses	on separate s	sheets.

1. What did you like / not like about this session?

I thought the whole thing was fine.

2. What did you like / not like about using the ICN (Iowa Communications Network) distance learning classroom for this program?

It was weind. It Deemed noone was there, but on the T.V. Screens, there were a ton of people!

## BEST COPY AVAILABLE

Return forms to:

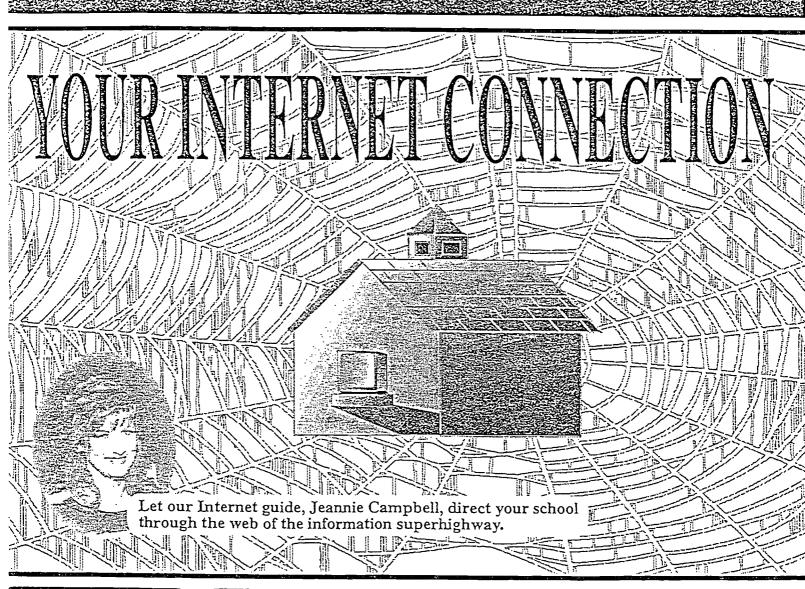
IPTV, Educational Telecommunications, P O Box 6450, Johnston, IA 50131



ALL · ACROSS · IOWA

Carry neonance redition of providing concational coppositions.

elowardinicalelevision-alone with a Desperment of Education Sar-Schools grant from the work



information and understanding that you need to get started."

> Dave Blair Green Valley AEA

It gave me the right questions to ask

Doug Williams Superintendent, Gilbert Community Schools Comprehensive; thorough, understandable."

Colette Wassom Scott Northwest Iowa Community College "I finally understand "

Greta M. Ivanovic Iowa Public Television

Copies of the program are available conviewing

Fon love's 15 area education agencies

for the videotape and promotion supported by USDE Star Schools grant #R203 F5000 I-95

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# Appendix G:

# Preservice Teacher Education

List: IDLA Conference Attendees Sponsored by Teacher Education Alliance

Results of TEA Evaluation Surveys for Workshops held in Conjunction with IDLA Conference Summary

Teacher Education Alliance Conference Survey

Teacher Education Alliance Project Summary January-April, 1996

Table: Summary of Teacher Education Alliance Campus Visit Participants

Teacher Education Alliance College Presentation

Teacher Education Alliance Participant Survey

TEA Times February, 1996

TEA Times May, 1996

Teacher Education Alliance Request for Proposals

Teacher Education Alliance Funded Research Projects

**Evaluation Request** 



### IDLA Conference Attendees Sponsored by Teacher Education Alliance

Diane Alt Central College

Kueier Chung Grandview College

Paulette Church Waldorf College

Marge Clark Clarke College

Bob Corio Briar Cliff College

Jack Fennema Dordt College

Denise Harriman Cornell College

Dennis Lamb Westmar University

Sharon Jensen Simpson College

Dennis Maxey Buena Vista University

Terry McNabb Coe College

Donna Merkley Iowa State University

Judith Nye Luther College

Bob Ristow St. Ambrose University

Janet Rohner Mount Mercy College

James Romig Drake University

Merilee Rosberg Mount Mercy College

Sharon Smaldino University of Northern Iowa

Priscilla Smith Marycrest University

Clement Steele Loras College

Suzanne Torkelson Wartburg College

Roger Williams Iowa Wesleyan College

Rose M. Zbeik University of Iowa



### Results of TEA Evaluation Surveys for Workshop Held in Conjunction with IDLA Conference University of Iowa, February 29 - March 1, 1996

The Preservice component of the Teacher Education Alliance offered six different workshops/sessions as a separate track at the Iowa Distance Learning Association Annual Conference held at the University of Iowa, Iowa City on February 29 - March 1, 1996. Twenty-two individuals from Iowa colleges and universities attended. Fourteen participants were asked to rate the sessions they attended for both quality and usefulness. Twelve surveys were returned. Ratings were on a five point scale: 1=very poor, 2=poor, 3=mediocre, 4=good, 5=very good. Average ratings for each session are listed below.

Workshop/Session	Quality	Usefulness	
Interactive Distance Learning	4.50	4.17	
Past, Present and Future	4.00	4.00	
Discussion Groups	4.50	4.33	
Distance Education in Iowa	4.20	4.50	
Virtual Field Experience	4.91	4.82	
Wrap-up	4.50	4.17	
Overall	4.72	4.72	

Participants were also asked to indicate what they liked best and suggestions for improvement. Responses are categorized below.

Liked Best	Number of times mentioned
Meaningful topics	6
Feeling of support/warmth	4
Collaboration opportunities	4
Assistance possibilities	2
Organization	1

Suggestions for Improvement	Number of times mentioned
Collaboration with colleges/K-12 schools	4
Allow more time for each session	3
Information on funding and grant writing	1
Examples of how ICN is being used	1

ERIC Full fext Provided by ERIC

### Teacher Education Alliance Conference Evaluation Feb. 29 - Mar 1

Please complete this form at the last session you attend (among those listed below) and return it to the session moderator or mail the completed form to RISE, E005 Lagomarcino Hall, Iowa State University, Ames, Iowa 50011

Your opinions are important. We would like you to rate the quality and usefulness of the sessions you attended. Please circle a value under each category. If you did not attend a session, circle NA.

=good 5=very good					NA=not applicable						
Rating of Quality						Rating of Usefulness					
1	2	3	4	5	NA	1	2	3	4	5	NA
1	2	3	4	5	NA	1	2	3	4	5	NA
1	2	3	4	5	NA	1	2	3	4	5	NA
1	2	3	4	5	NA	1	2	3	4	5	NA
1	2	3	4	5	NA	1	2	3	4	5	NA
1	2	3	4	5	NA ·	1	2	3	4	5	NA
1	2	3	4	5	NA	1	2	3	4	5	NA
	1 1 1 1 1	1 2 1 2 1 2 1 2 1 2 1 2	Rating of  1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3	Rating of Qua  1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4	Rating of Quality  1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5	Rating of Quality  1 2 3 4 5 NA	Rating of Quality  1 2 3 4 5 NA 1	Rating of Quality       Rating         1       2       3       4       5       NA       1       2         1       2       3       4       5       NA       1       2	Rating of Quality       Rating of         1       2       3       4       5       NA       1       2       3         1       2       3       4       5       NA       1       2       3         1       2       3       4       5       NA       1       2       3         1       2       3       4       5       NA       1       2       3         1       2       3       4       5       NA       1       2       3         1       2       3       4       5       NA       1       2       3         1       2       3       4       5       NA       1       2       3         1       2       3       4       5       NA       1       2       3	Rating of Quality       Rating of Use         1       2       3       4       5       NA       1       2       3       4         1       2       3       4       5       NA       1       2       3       4         1       2       3       4       5       NA       1       2       3       4         1       2       3       4       5       NA       1       2       3       4         1       2       3       4       5       NA       1       2       3       4         1       2       3       4       5       NA       1       2       3       4         1       2       3       4       5       NA       1       2       3       4	Rating of Quality       Rating of Usefuln         1       2       3       4       5       NA       1       2       3       4       5         1       2       3       4       5       NA       1       2       3       4       5         1       2       3       4       5       NA       1       2       3       4       5         1       2       3       4       5       NA       1       2       3       4       5         1       2       3       4       5       NA       1       2       3       4       5         1       2       3       4       5       NA       1       2       3       4       5         1       2       3       4       5       NA       1       2       3       4       5         1       2       3       4       5       NA       1       2       3       4       5

Describe what you liked best about the TEA activities and why.

Suggestions for improvements or topics you would like to see addressed in the future.



### Teacher Education Alliance Project Summary January-April, 1996

### Iowa Distance Learning Association Conference (IDLA) - February 1996

The Iowa Distance Learning Association is a state chapter of the United States Distance Learning Association. Its constituents are educators in K-12 schools, area education agencies, private and public colleges and universities, and corporate medical, military, and government professionals. A variety of distance education topics were presented at the IDLA's 1996 annual conference centering around the theme, Going the Distance...Technology Impacting Change. A series of special sessions for pre-service teacher educators were sponsored by the Teacher Education Alliance.

### Pre-Conference Activities

- 32 letters sent to Iowa college presidents and university deans requesting name of educational faculty contact and inviting institution to participate in Teacher Education Alliance activities, including attendance at the IDLA conference
- Follow-up phone calls made to college presidents and university deans
- 29 contact people identified
- 26 indicated intent to participate in TEA activities at IDLA conference

### **Participants**

- 23 attended IDLA conference representing all three regents institutions and 19 private colleges
- 17 attended TEA activities, all representing the Education Department at their institution

### <u>Agenda</u>

- 3 presentations given by the TEA at the IDLA Conference:
   Distance Education and the Teacher Education Alliance
   Iowa Star Schools Project
   Virtual Field Experience
- Other activities participants had an opportunity in which to be involved:

Discussion Groups
Social Activities
IDLA Concurrent Sessions



Research Institute for Studies in Education, Iowa State University

#### College Campus Visits Participante

<u>Participants</u>		•
College	Number of Participants	ICN Delivery
Buena Vista University	7	
Central University	10	
Clarke College	3	X
Coe College	3	
Dordt College	9	
Grandview	10	
Iowa Wesleyan College	17	
Loras College	3	X
Luther College	14	X
Mount Mercy College	4	
Simpson College	6	X
St. Ambrose University	5	
Teikyo Marycrest University	18	· <b>X</b>
University of Dubuque	1	X
Westmar College	2	

- · Several other visits scheduled
- Majority of participants have been education faculty
- Administrators and other faculty also participated

#### <u>Agenda</u>

- ICN network
- IDEA/TEA
- Room with a View video
- Examples of how distance education is being used

K-12 districts

Teacher education programs

- Distance Learning and Distance Teaching
- Open Discussion
- Resources

#### Materials distributed at each visit

- Iowa Communication Network brochure
- Iowa Distance Education Alliance/Teacher Education Alliance brochure
- Iowa Database information sheet
- Summary of Multimedia Projects Showcase Winners
- Teleteaching: Distance Education Planning, Techniques, and Tips
- TEA notepads and pencils

#### Materials available as requested

- Distance Education video series
- Interactive Television workshop notebook
- Encyclopedia of Distance Education
- Classrooms of the ICN
- · Miscellaneous reference material



#### **ICN Session with Students**

#### **Participants**

- 2 senior level education classes from Cornell College
- 40 students, 2 education faculty members

#### **Agenda**

- ICN network
- IDEA/TEA
- Room with a View video
- Examples of how distance education is being used

K-12 districts

Teacher education programs

- Distance Learning and Distance Teaching
- Hands-on practice using ICN equipment
- Presentation of mini-lessons using ICN equipment

#### Interactive Distance Education Workshop Sign-up

• 12 education faculty members from private colleges requested and received assistance in registering for Interactive Distance Education workshops



6/6/96

Iowa Distance Education Alliance Teacher Education Alliance Westmar College Presentation

Star Schools Program Nancy Maushak Dan Hanson

- 2 Agenda
  - Introduction
  - Background
    - Room with a View
    - ICN
    - IDEA/TEA
  - Examples .
  - Distance Learning
  - Distance Teaching
  - Discussion
  - Resources
  - Iowa Communications Network
    - Interactive fiber optic network
    - Data, voice and video
    - 195 classrooms online
    - Additional 400 planned
  - Iowa Distance Education Alliance (IDEA)
    - Collaborative effort



- Supported by Star Schools
- Components
  - Project coordination
  - Clearinghouse
  - Regional partnerships
  - Teacher Education Alliance

# 5 Cacher Education Alliance

Purpose: Support will be provided for distance education training needs of preservice programs in colleges and departments of teacher education in Iowa's public and independent universities and colleges.

- 6 TEA Activities
  - Coordinate technology training
  - Provide assistance and resources
  - Collect effective strategies
  - Publish newsletter
  - Fund research
  - Publish results of research
  - ☐ Showcase Award Winners
    - Mars Base Project '
    - Spanish Exchange Project
    - Mormon Trail Project
  - ☐ Teacher Education Examples
    - Virtual Field Experience ISU
    - Multimedia Project Coe College



İ	All-state Music - 150
9	☐ A Look at Other Colleges
	Low-enrollment Courses
	Sharing Expertise
	Advising
	■ Directory
0	Distance Learning: Is it unique?
	Home TV viewing vs interactive TV
	■ Teacher contact in/out of class
	Student contact during class
	Student contact after class
	Handing in assignments
	Other
11	☐ Distance Teaching: Is it unique?
	■ Planning
	Technology capabilities & limitations
	Use of visuals & other media
	Physical movement and dress
12	☐ Distance Teaching:Is it unique?
	☐ Interaction onsite and remote
	■ Effective teaching strategies
	■ Taking command of the classroom
	■ Need for efficiencies
13	Discussion Topics



PART III Demographic information  A. Please tell us a little about yourself by res	ponding to the follow	ing (	ques	stions	<b>.</b>					
35. What is your gender?	Female				Male					
36. What is your education level?	Bachelors Degree					_Masters	Degi	ee		
·	Specialists Degree					_Doctora	l Deg	ree		,
	Other (Please spec	ify.)	)							
37. How many years experience do you have	e at the college level?					-				
Less than 5 years	10-14 year	S				20-24 ye	ears			
5-9 years	15- 19 years	5				_25 years	or m	ore		
38. How many years experience do you have	e at the K-12 level?									
Less than 5 years	10-14 year	s				20-24 ye	ears			
5-9 years	15- 19 year	S		•		25 years	or m	ore		
39. Which group of students is your primary	responsibility?									
Elementary Educatio	n Majors		_Sec	conda	ıry Edı	ication Ma	ajors			
Other (Please specif	y)		_							
40. Which category of education classes bes	t describes your prima	ary t	teach	hing 1	respon	sibility?				
Education Foundation	onsMe	etho	ds (I	Pedag	gogy)					
Media (Technology)	Ot	her(	(Plea	ase s	pecify)	)	•			
41. Have you attended a previous workshop	/institute on distance	edu	catio	on?		yes		n	0	
42. How would you rate your knowledge of o	distance education?	r	1 none		2 very little	3 some	qu	4 uite bit	exter	
43. How would you rate your involvement in	n distance education?	I	1 none		2 very little	3 some	qι	4 uite bit	exter	
44. If distance education over the ICN was would you use it to teach education class		tuti	on,			yes			no	4.
45. If distance education over the ICN was would you teach preservice teachers how		ituti	on,			yes			no	٠
46. Do you know of a private college that yo for the infusion of distance education? If yes, please identify.	•	tutio	on 			yes 			no	
B. Think about the extent of coverage of dist the following scale and respond to the stater classes.  Extent of coverage 1=none	nents by circling the a	ppro	opria	ate ni	ımber	for both n	nedia	clas	ses and	l metho
; <b>0</b> , , , , , , , , , , , , , , , , , ,				ia Cla		. <del>-</del>			d Clas	
47. Demonstration of distance education tec	hnology	1	2	3	4 5		1	2	3 4	5
48. Presentation of methods of using distance		1	2				1	2	3 4	5

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Opportunity to use distance education technology.

49. Modeling of ways to use distance education

#### PART II Individual

Now, think about yourself and your behaviors and attitudes and respond to each statement.

Use the following scale.

	se the following scalestrongly 2=disagree 3=moderately 4=undecided disagree	5=mod		ĺy '	6=a <sub>{</sub>	gree	<b>7</b> =	strong! agree
		SD	D	MD	U	MA	A	SA
11	. I am generally cautious about accepting new ideas.	1	2	3	4	5	6	7
12	. I am suspicious of new inventions and new ways of thinking.	1	2	3	4	5	6	7
13	I rarely trust new ideas until I can see whether the vast majority of people around me accept them.	1	2	3	4	5	6	7
14	. I am aware that I am usually one of the last people in my group to accept something new.	1	2	3	4	5	6	7
15	. I am reluctant about adopting new ways of doing things a until I see them working for people around me.	1	2	3	4	5	6	7
16	. I tend to feel that the old way of living and doing things is the best way.	1	2	3	4	5	6	?
17	. I am challenged by ambiguities and unsolved problems.	1	2	3	4	5	6	7
18	. I must see other people using new innovations before I will consider them.	1	2	3	4	5	6	7
19	. I am challenged by unanswered questions.	1	2	3	4	5	6	7
20	I often find myself skeptical of new ideas.	1	2	3	4	5	6	7
21	I don't even know what distance education is.	1	2	3	4	5	6	7
22.	I am not concerned about distance education.	1	2	3	4	· 5	6	7
23.	I have a very limited knowledge about distance education.	1	2	3	4	5	6	7
24.	I would like to know what including distance education in the teacher education program at my institution would require in the immediate future.	1	2	3	4.	5	6	7
25.	I would like to know how my teaching is supposed to change when using distance education.	1	2	3	4	5	6	7
26.	I would like to know how my role will change when I am using distance education in my classes.	1	2	3	4	5	6	7
27.	The use of distance education can expand learning opportunities offered in teacher education.	1	2	3	4	5	6	7
28.	The cost of implementing distance education is too high.	1	2	3	4	5	6	7
29.	The use of distance education will promote collaboration among colleges with teacher education programs.	1	2	3	4	5	6	7
30.	Distance education classes will not allow interaction between instructor and students.	1	2	3	4	5	6	7
31.	Instruction in distance education should become an important component of the teacher education program.	1	2	3	4	5	6	7
32.	Distance education is important to the future of teacher education and education in general.	1	2	3	4	5	6	7
33.	Distance education is important to the future of my college.	1	2	3	4	5	6	7
34.	Overall, my attitude toward distance education is positive.	1	2	3	4	5	6	7



# **Teacher Education Alliance Participant Survey**

# Spring, 1996

Your involvement in the Teacher Education Alliance is appreciated. As part of the project's evaluation activities, we are collecting information to determine the perceptions of teacher education faculty about the use of distance education in their college. Your responses will be confidential. Thank you for your help!

Name of your college/university	
Professional position/title	
My institution is connected to the ICNyesno	

#### PART I College

Use the following scale and respond to the statements by circling the appropriate number.

1=strongly 2=disagree 3=moderately 4=undecided

12712	unagice .	agre	<b>E</b>				Van São	agree
Му	college (is)	SD	.D	MD	υ	MA	A	SA
1.	Follows the belief that "the old way of doing things is the best."	1	2	3	4	5	6	7
2.	Does not respond quickly enough to necessary changes.	1	2	3	4	5	6	7
3.	Rarely trusts new ideas and ways of functioning.	1	2	3	4	5 .	6	7
4.	Considered one of the leaders of its type.	1	2	3	4	5	6	7
5.	Creative in its method of operation.	1	2	3	4	5	6	7
6.	Seeks out new ways to do things.	. 1	2	3	4	5	6 ·	7
7.	Frequently tries out new ideas.	1	2	3	4	5	6	7
8.	Receptive to new ideas.	1	2	3	4	5	6	7
9.	Slow to change.	1	2	3	4	5	6	7
10.	Very inventive.	1	2	3	4	5	6	7



- Contribution of distance education
- Concerns
- Possible solutions
- Ways of including distance education

# Resources

- Primer
- Iowa Database
- Showcase examples
- Video Series
- Other

15 🔤

### Teacher Education Alliance

Research Institute for Studies in Education E006 Lagomarcino Hall Iowa State University Ames, Iowa 50011

Nancy Maushak Dan Hanson nmaushak@iastate dhhanson@iastate.edu 515-294-1941 515-294-2438



# PART IV Open ended questions

Please take a moment to reflect and respond freely to the following questions.

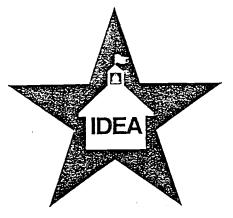
51. Describe ways you see distance education becoming part of your teacher education program.

52. What barriers do you see to the infusion of distance education in the teacher education program at your institution?

53. How would you describe the mission of your college in general and how it impacts the teacher education program?

THANK YOU for your willingness to complete this survey. Return competed form to: Research Institute for Studies in Education, Star Schools Evaluation, E005 Lagomarcino Hall, ISU, Ames, IA 50011





# TEATIMES

Teacher Education Alliance Iowa Distance Education Alliance

Iowa's Star Schools Project

February 15, 1996 Volume 4, Number 1

# Calendar

February

29-March 1
IDLA Conference
Iowa City

#### March

1

ICN Workshop, Area 9
Bettendorf

:5-7

ICN Workshop, Area 10 Cedar Rapids

6-8

ICN Workshop UNI

12-14

ICN Workshop, Area 6 Marshalltown

26-28

ICN Workshop, Area 15 Ottumwa

## April

2 - 4

ICN Workshop, Area 2 Clear Lake



# Son of TEA TIMES

By Charles Schlosser

f TEA Times were a movie, it would be a sequel. "TEA Times II." Or maybe "Son of TEA Times." Let me explain.

In the spring of 1993, the Teacher Education Alliance began publishing a two-page newsletter for its handful of members. As circulation expanded to include the hundreds of participants in TEA workshops and institutes, the newsletter grew to four pages. The final issue, a glimpse into the future of distance education in Iowa, was published in March of last year, was six pages in length, and was distributed to some 1500 Iowans, including all the state's legislators.

And that was it. No Star Schools, no *TEA Times*. But then a funny thing happened. Last fall, the federal government lavished a 1-year, \$4 million Star Schools grant on Iowa. Presto! *TEA Times* redux.

This time, however, the focus has shifted—and narrowed. While the first TEA and its newsletter were decidedly K-12 oriented, the mission of the revived TEA is limited to supporting distance education training among faculties of preservice teacher education programs in Iowa's public and private colleges. The challenge has been to produce a publication that is interesting and useful to a diverse audience—in four pages. I think we've succeeded.

Regular features of *TEA Times* will be the column *Simonson Says* by TEA director Mike Simonson, articles about distance education at K-12 and higher education levels by Mary Anderson and Dan Hanson, a calendar of distance education-related events, and a listing of helpful resources for distance educators. An article by a guest author will round out each issue.

So welcome to the new *TEA Times*. Share it with a friend and enjoy it while you can. It's a sequel with a limited engagement.



TEA Times editor Charles Schlosser coordinates the preservice component of the TEA. He works for the Research Institute for Studies in Education at Iowa State University.





## Simonson Says

# A good IDEA, again

"Play it again, Sam." Casablanca, 1943

owa has once again been selected to lead the nation in distance education. As most now know, the Iowa Distance Education Alliance, Iowa's Star Schools project, was funded for a third year. The IDEA, which began in 1992 and continued through 1994, was the largest externally funded education project in Iowa's history. The IDEA equipped more than 100 classrooms, trained thousands of Iowa educators in distance education strategies and curriculum revision processes, developed an on-line computer support network, and conducted a massive research and evaluation activity. It brought together professionals from every category of educational institution in the state, and provided leadership to the United States in the effective practice of distance education.

Most thought that Iowa's Star Schools project was over in 1994. Last July's "Bridging The Distance" conference at Iowa State University served as a culminating event for many who had worked for over two years to complete the goals, objectives, and activities of the

IDEA. The Iowans in attendance went home from this international distance education meeting and mentally began preparing to continue their work by building on the many partnerships and friendships established during the two years of the IDEA.

Then, something wonderful and unanticipated occurred. The IDEA received notice of an 11th-hour decision to fund the project for at least one more year, beginning October 1, 1995. Since the original infrastructure of the IDEA was dismantled in 1994, it took several months to reorganize but, under Pamela Johnson's leadership, the IDEA is now fully functioning, and the preservice teacher education component, the Teacher Education Alliance (TEA), has been reestablished at Iowa State University.

The TEA will have a single, primary purpose during the next nine months; to help teacher education faculties infuse distance education into their preservice education curricula. Charles Schlosser will coordinate the efforts of Dan Hanson and Mary Anderson in working with teacher educators around the state. Trina Garman will serve as the alliance's secretary. Schlosser's group will work with me to complete goal 5 of the IDEA's six-

goal plan (see below), providing support for "distance education training needs of preservice programs in colleges and departments of teacher education in Iowa's public and independent universities and colleges."

ISU staff also will evaluate the IDEA, as it did in the 1992 project. Christine Sorensen will work with Nancy Maushak and Omalley Abel to coordinate data collection activities across the state. The evaluation team will address goal 6 of the IDEA--to, "document the impact of, and provide direction to, activities of the IDEA partners."

The IDEA was based originally on a belief that collaboration was essential to continued excellence in Iowa education. In terms of collaboration, the new Teacher Education Alliance will "play it again, Sam."



Mike Simonson is coordinator of the TEA and is associate director of the Research Institute for Studies in Education and professor of Curriculum and Instructional Technology at Iowa State University.

# Iowa Distance Education Alliance Project Goals

Goal 1 Instructional materials for improvement of instruction in mathematics, science, foreign languages, and other subjects, such as literacy skills and vocational education utilizing distance learning technologies will be developed and made available to educators and students of Iowa

Goal 2 Iowa educators and students will be supported in distance learning technologies by training and access to ICN video and data resources.

Goal 3 Local and regional educational personnel will receive technical training and planning assistance to ensure that students and educators can easily access distance learning technologies in an efficient manner.

Goal 4 Iowa educators and students will have access to information concerning distance education opportunities and will be provided with actual experiences utilizing distance education technologies in targeted curricular areas.

Goal 5 Support will be provided for distance education training needs of preservice programs in colleges and departments of teacher education in Iowa's public and independent universities and colleges.

the impact of; and provide direction to activities of the IDEA partners.









# IDLA "goes the distance" for third annual conference

by Dan Hanson and Mary Lagomarcino Anderson

The third annual Iowa Distance Learning Association conference, "Going the Distance: Technology Impacting Change" will be held at the Iowa Memorial Union in Iowa City on Thursday, February 29 and Friday, March 1. It will offer opportunities for educators and administrators, educational trainers, and media specialists to learn about distance education in general and distance education in the state of Iowa in particular. Among those scheduled to appear are Governor Terry Branstad; Lionel Baldwin, President and Founder of the National Technological University (NTU); and Cathy de Moll, President of TBT International, Inc. and Project Consultant for MayaQuest, St. Paul Minnesota.

Pre-conference half-day workshops will begin at 9:00 a.m. Thursday morning. Topics will include: preparations for Phase 3 ICN site connections, planning for interactive distance learning, planning and implementation for local area networks, teaching with the World Wide Web, and worldwide video conferencing. Conference tracks include general ses-

sions, administration and policy, teaching and learning with technology tools, case studies in research and evaluation, and a swing track covering a multitude of distance learning opportunities.

For additional information, contact the Iowa Distance Learning Association at 3206 University Avenue, Des Moines, Iowa 50311 or call (515) 271-2182. Conference information can be found on the World Wide Web at http://www.educ.drake.edu/idla/ or by e-mail at idla@acad.drake.edu

# TEA activities at the conference

The Teacher Education Alliance (TEA) will sponsor conference sessions for representatives of preservice teacher education programs across Iowa. TEA participants will be introduced to the new TEA program and its staff and will be asked to provide information about preservice distance education needs at their individual institutions.

TEA coordinator Mike Simonson will discuss the TEA's past activities and

plans for the current project. Pamela Johnson, coordinator of the IDEA, will outline the goals and activities of Iowa's Star Schools project.. In addition, meetings will be scheduled with preservice representatives and TEA staff to determine distance education needs and plans of each school involved in the TEA. This will help the TEA staff meet the needs of each institution. A reception for TEA members will provide an opportunity to meet other teacher educators and the TEA staff.

For information about the TEA, contact Mary Lagomarcino Anderson (lago@iastate.edu) or Dan Hanson (dhhanson@iastate.edu), E006 Lagomarcino Hall, Iowa State University, Ames, Iowa 50011 or call (515) 294-2438.



Mary Lagomarcino Anderson and Dan Hanson work for the Research Institute for Studies in Education at Iowa State University.

# Classroom gold: Resources for distance education

by Mary Lagomarcino Anderson

educators...

ducational resources come in many forms. The purpose of this column is to present our readers with various resources which could benefit the preservice teacher educator as well as K-12

The Iowa Distance Education Alliance as part of the first of Iowa's Star Schools projects produced a series of eight video tapes dealing with the foundations and applications of distance education. Running time for the tapes varies from a minimum of seven minutes to a maximum of 18 minutes in. Tapes in the foundations series include: Definition and Background,

Research and Theory, Technologies and Terminology, and the Iowa Communications Network. Tapes in the applications

series include: The Teacher, The Student, The Curriculum, and The Classroom. The set has been designed so that tapes may be

viewed nonsequentially to better match the instructor's curriculum. The award-winning capstone video, "A Room with a View," which provides an overview of distance education in Iowa, is also available. Many institutions already have this series; copies were distributed to the 15 Area Education Agencies and all pre-service teacher education institutions in Iowa at the end of the first Star Schools project. For information about this excellent series, contact Mary Anderson via e-mail at lago@iastate.edu or mail at E006

Lagomarcino Hall, Iowa State University, Ames, IA 50011 or phone (515) 294-2438.





# **Interactive television workshops**

by Mary Lagomarcino Anderson

he Educational Technology Train ing Institute at the University of Northern Iowa is offering workshops to introduce educators to the use of interactive television and the Iowa Communications Network (see calendar, p. 1). Workshop topics will focus on the medium of distance education, the ICN, telecommunications, interactive television technologies and system components, distance education teaching strategies, interactive television resources, integration of instructional resources, research generalizations, and critical issues involved in teaching at a distance. Workshop activities will provide participants with the opportunity for hands-on experience using ICN classroom equipment.

These workshops are designed to meet the needs of elementary and secondary teachers, higher education faculty, health care providers, educational administrators, media specialists, technology coordinators, and other education specialists.

Each workshop, coordinated by UNI faculty, is three days in length and is scheduled from 8:30 am - 12:00 noon and 1:00 pm - 4:00 pm. Workshops are limited to a maximum of 20 participants. To attend an Area workshop contact the Area Educational Agency hosting the workshop. To attend a workshop being held at UNI, contact Terry Goro, manager of the Iowa Educational Technology Training Institute (319) 273-2309.



#### TEA TIMES

Published every two months by the. Teacher Education Alliance of the Iowa Distance Education Alliance

#### Staff.

Charles Schlosser Mary Lagomarcino Anderson Dan Hanson

- 1

Teacher Education Alliance Research Institute for Studies in Education - 1 - participation E005 Lagomarcino Iowa State University Ames, IA 50011-3196 (515) 294-6919 Fax: (515) 294-9284 lago@iastate.edu

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# Coming in the March issue of your TEA TIMES:



Connecting pre-service teachers with middle school students

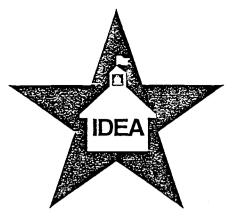


Simonson examines changes in higher education



Teacher Education Alliance E005 Lagomarcino Hall Iowa State University Ames, IA 50011





# TEA TIMES

Teacher Education Alliance Iowa Distance Education Alliance Iowa's Star Schools Project

May 23, 1996 Volume 4, Number 2

# Calendar

June

5-7

Interactive Distance Education Workshop, Area 5, Fort Dodge

#### 10 - August 4

Principles of Distance Education 2 credit course offered by Iowa State University. Available through the ICN MTR, 11-12. Call 1-800-262-0015 and ask for Joyce Hanson to register.

#### 11-13

Interactive Distance Education Workshop, Area 4, Orange City

#### 18-20

Interactive Distance Education Workshop, Area 12, Sioux City

#### 19-21

Interactive Distance Education Workshop, Area 11, Johnston

#### 24-26=

Interactive Distance Education Workshop, Area 11, Johnston

#### 25-27

Interactive Distance Education Workshop. Area 2, Clear Lake



# Virtual field experience: Connecting preservice teachers with 8th-graders

By Dan Hanson

ouston, we have a problem," quipped the eighth-grader in a Cedar Falls ICN classroom as his teacher struggled to get her microphone to work. The 25 Iowa State University preservice teachers, participating in the class from Ames, laughed with the student and his classmates. Thirty of teacher Ann Palmer's language arts students were meeting instructor Gayle Allen's Teaching Reading in the Secondary School students live via the ICN for the first time. This exchange was part of a semester-long partnership between the students at Gilbertville, Iowa's St. Joseph's Middle School and the ISU education majors.

With her microphone working, Palmer proceeded with the activities of the day. Each eighth-grader had been paired with a preservice teacher at ISU. Pictures had been exchanged through the mail and the pairs had shared information about their



Gayle Allen

In their virtual field experience, Allen's students get "technology and junior high all at once."

hobbies and interests via e-mail. Today they would have a chance to talk live at a distance with each other. Each pair of students went to the front of their respective classrooms and exchanged greetings and smiles using the two-way audio and video equipment of the ICN classrooms.

After introducing themselves, the obviously enthusiastic eighth-graders asked such questions as "Why do you want to become a teacher?" or "What classes do you take?" The preservice teachers' questions frequently centered on the subject matter they planned to teach in the future. "What is your favorite book?" or "How much reading do you need to do at home?" are two examples. Smiles and laughter marked

Virtual, continued on page 3

Dan Hanson is co-editor of TEA Times. He is a research asistant in the Research Institute for Studies in Education at Iowa State University.





## Simonson Says

# \$150 Million? Blame it on the ICN

owa educators are fortunate; the Iowa Communications Network (ICN) was built for them. It was not originally a priority of the Iowa educational community, yet most who have studied the development of this expensive project agree that it has been money well spent. Even those who have lobbied for increased funding in education have not claimed that the millions of dollars spent on the ICN has diverted funds from other educational priorities.

Actually, what little evidence there is indicates that funding for the ICN has had no negative impact on other educational funding, and there is some anecdotal evidence that successful use of the ICN has made many Iowans realize the potential of technology for education. It is probable that the popularity of the ICN made easier the passage of the recent

\$150 million technology appropriation. Certainly, \$4 corn and \$7 beans didn't hurt, either.

In Iowa education, the infusion of technology is happening everywhere. The US West Foundation is pouring hundreds of thousands of dollars into educational technology. The U.S. Department of Education has funded tens of millions of dollars in grant requests from Iowa education, and local communities are identifying technology for schools as a major priority.

"Lighting the fiber" in 1993 was undoubtedly a watershed event for Iowa education. It is likely that the first use of the ICN heralded the beginning of a new era in Iowa education, in which technologies would be routinely available to teachers and learners. Perhaps educational historians will identify the

autumn of 1993 as the beginning of the golden years of technology in Iowa education--an age of enlightenment based on educational technology.

We in the TEA are dedicated to assisting in the preparation of the next generation of Iowa teachers who will expect, even demand, that technologies are integral components of the learning process. TEA Times will keep you informed of our progress. Please drop us a note, and keep us informed of yours.



Mike Simonson is coordinator of the TEA and is Associate Director of the Research Institute for Studies in Education and professor of Curriculum and Instructional Technology at Iowa State University.





# A vision of the future: Enriching teacher education

by Nancy Maushak and Dan Hanson

t the end of February, teacher education faculty from Iowa colleges and universities gathered in Iowa City to share visions and concerns related to the role of distance education in teacher education. Opinions were varied and many possibilities were discussed.

The potential for collaboration was a critical topic. Distance education permits new ways for colleges to work with other colleges as well as with K-12 schools. Collaboration among colleges and with K-12 districts can enhance the experiences of the preservice teacher. For instance, colleges could jointly offer selected classes. By sharing of faculty expertise, cooperating colleges could expand students' perspectives and teacher education curricula could be strengthened. This would be especially helpful in the high-demand areas of special education and early childhood.

In addition, faculty members who teach similar methodol-

ogy classes at different institutions could work together to provide the teacher education student with additional feedback. For example, the preservice teacher would present mini-lessons to gain valuable experience in using distance education technologies. Students would then receive additional evaluation comments from peers and faculty at the distant institution.

Alternatively, connecting preservice programs to K-12 classrooms through distance education technologies offers many possibilities for education students. One possibility would be to have student teachers meet with their K-12 class

Vision, continued on page 4

Nancy Maushak is a member of the TEA evaluation team. Dan Hanson is co-editor of TEA Times. Both authors are research assistants in the Research Institute for Studies in Education at Iowa State University.



#### Virtual, continued from page 1

the exchanges as students self-consciously saw themselves on the monitors and as they tried to imagine what it would be like to be a student in college or remember what it was like to be an eighth-grader.

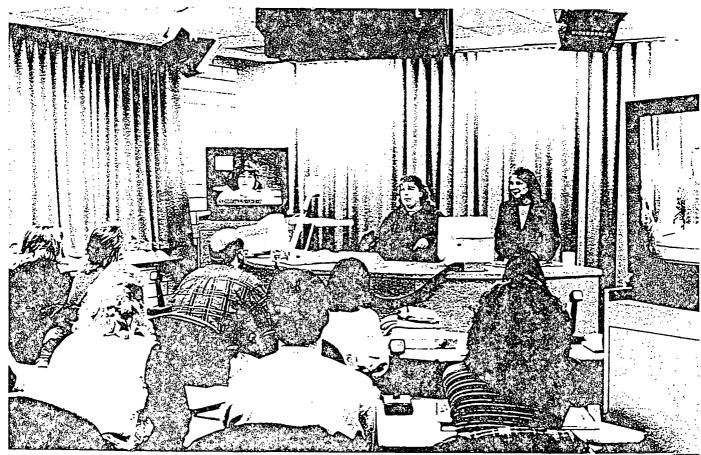
In its third year, this unique experience offers many advantages for the preservice teachers at Iowa State University. Scott Edens, a student in Allen's class, said that this experience has given him a good introduction to the use of technology and has made his classroom work real. Communicating with eighth-grader gives meaning to theory being studied in the class. He added that none of his classmates had wanted to teach eighth-graders, but the contact with the middle school students has raised enthusiasm for working with students of this age. This was echoed by classmate Erin Reichert, who said that seeing the eighth-graders interact makes you want to work with them.

Allen says the interaction of her students with the eighthgraders gives her immediancy of examples for her classroom discussions. In addition, she feels that it helps her students learn to be comfortable with technology, learn the reading habits of eighth-graders and help remember what it is like to be an eighthgrader. So her preservice teachers get "technology and junior high all at once."

The biggest advantage for eighth-graders, according to Allen, is that the experience has created a real interest in attending college for these rural Iowa students.

While it wasn't like communicating from outer space, the ICN did connect two separated worlds in Iowa. Eighth-graders in Gilbertville and preservice teachers at Iowa State learned more about each other, and the world they hope to enter.





Angela Furtado meets her 8th grade partner from Gilbertville in the the ICN room at ISU (top photo). Gayle Allen joins Mindy Lamaack behind the teacher's console. Photos by Dan Hanson/TEA Times.



Vision, continued from page 2

before actually beginning the student teaching experience.

Linking preservice teachers to K-12 students during coursework is still another possibility. For example, many education students are not sure what a third-grader's capabilities or interests are. Connecting with actual third grade students provides valuable insight into the mind and life of these students.

Distance education can increase exposure to cultural and ethnic diversity. Opportunities expand as connections are made outside the state.

Another possibility would involve linking education students with master teachers. An entire class could meet with a panel of master teachers via the ICN to discuss teaching or discipline techniques, or methods class students could be paired with master teachers and interact using email. Either way, students could see the immediate application of theories and methods discussed in class.

The wealth of resources available through the use of technology can enrich the preservice program. For example, communicating with authors of books or journal articles, observing exemplary uses of distance education or taking advantage of the resources on the World Wide Web broaden the learning experience.

This type of access also positions preservice teachers to critically evaluate resources to improve their own teaching.

While faculty members from rural colleges in Iowa express an interest in connecting to the wide-range of resources available through telecommunications, they are especially interested in taking advantage of meetings, conferences, and training seminars offered by professional organizations. Teacher education faculty view the chance to expand their knowledge through access to graduate coursework and college seminars or workshops as a major advantage of distance education.

A vision for the integration of distance education in the teacher education program exists, but there are barriers. While attitudes toward distance education are positive, lack of experience and training inhibits the use of distance education technologies. Finding the time for incorporating distance education topics and resources into already overloaded curricula is another major challenge. The fact that many colleges in Iowa do not have ICN connections and lack the funding to acquire the technology limits the inclusion of distance education experiences.

While teacher education faculty

#### TEA TIMES

Published every other month by the Teacher Education Alliance of the Iowa Distance Education Alliance

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members are excited about the potential of distance education within the preservice program, they are frustrated with the reality of limited distance education capabilties in many colleges in the state. Despite this frustration, the educators' vision for improving their programs using distance education opportunites is impressive.





Teacher Education Alliance E005 Lagomarcino Hall Iowa State University Ames, IA 50011-3196



#### TEACHER EDUCATION ALLIANCE IOWA DISTANCE EDUCATION ALLIANCE Iowa's Star Schools Project 1995-1996



## Request For Proposals

to study

#### DISTANCE EDUCATION IN IOWA

PROJECT TITLE: Research and Distance Education in Iowa

PROJECT PURPOSE: To fund proposals that investigate aspects of the diffusion of the innovation of distance education in Iowa. Of specific interest are studies that examine the use of the Iowa Communications Network, Iowa's statewide two-way full motion interactive fiber-optic telecommunications network, and the activities of the Iowa Distance Education Alliance.

AWARD AMOUNTS: Selected proposals will be funded for amounts up to \$500.

PROPOSAL DATES:

Proposals Due:

February 1, 1996

Awards Made:

February 15, 1996

PROPOSAL GUIDELINES: Proposals should be short (eight pages or less), and should follow guidelines available from:

The Research Institute for Studies in Education
Teacher Education Alliance
College of Education
E005 Lagomarcino Hall
Iowa State University
Ames, Iowa 50011
(515) 294-7009
(515) 294-9284 (FAX)

Request For Proposals



# TEACHER EDUCATION ALLIANCE IOWA DISTANCE EDUCATION ALLIANCE

Iowa's Star Schools Project 1995-1996



# REQUEST FOR PROPOSALS Research Grants - \$500

#### I. GRANT POLICIES

Grants are to encourage and support educational research about distance education in Iowa. This program does not fund requests for curriculum development, inservice training or workshops, unless there is a significant research component of the project.

#### A. Educational Research

<u>Types</u>

This project supports both basic and applied/action-oriented research.

1. basic research ---

Basic research is pursued without regard for the immediate applicability of the results to practical situations. Although the investigators may ultimately be interested in the application of their findings, they do not allow this interest to determine their choice of problem, theory, and research procedures. Basic research is more interested in methodological and theoretical rigor than in practical relevance. For example, a basic research study might concern the identification of different learning styles of students in a distance learning activity.

#### applied/action-oriented research ---

Applied/action-oriented research is pursued primarily to develop techniques and products which will have immediate classroom use. Although the early phases of applied research may occur in laboratory classrooms, the research purpose is the development of specific products which will be tested (or proved) later under ordinary classroom conditions. Applied research is more interested in educational relevance than in methodological and theoretical rigor. An example of an applied research study would be research on the effectiveness of interactive study guides in a math class.

NOTE: Although the above descriptions may help distinguish "basic" and "applied" research, it is also useful to think of them as occupying different points on a single continuum, with purest basic research (purely theoretical with no concern for practical application, only for the purpose of adding to the body of knowledge) on one end and applied research (strictly pragmatic, for the purpose of testing/evaluating how a specific idea or practice or product will impact the classroom or other part of the educational system) at the other end.



#### **Approaches**

A wide range of research approaches, from quantitative to qualitative, is acceptable. Studies appropriately using qualitative methodologies are encouraged.

#### Method

There are widely accepted techniques for conducting educational research. The techniques collectively are called the scientific method.

Grant applicants are encouraged to utilize the scientific method. Depending upon whether the quantitative or qualitative approach is selected, the detail, labeling, and/or sequence of conducting the following elements may vary.

Elements of the scientific method usually include:

- definition of the problem
- development of hypotheses or models to be tested/measured/assessed
- development of a study design and measuring instruments/processes
- data collection
- data analysis
- conclusions and inferences

NOTE: For further information regarding educational research, refer to sources such as:

Ary, Donald; Jacobs, Luch Cheser; and Razavich, Asghar. <u>Introduction</u> to Research in Education (Third Edition). Holt, Rinehart, and Winston, Inc.

Bogden, Robert C. and Sari Biklen. <u>Qualitative Research for Education</u>. Allyn and Bacon.

Borg, Walter R. and Gall, Meredith Damin. <u>Educational Research, An Introduction</u>. (Fifth Edition). Longman.

Kerlinger, Fred N. <u>Foundations of Behavioral Research</u>. (Third Edition). Holt, Rinehart and Winston, Inc.

Wittrock, Merlic C., editor. <u>Handbook of Research on Teaching</u>. (Third Edition). Macmillan Publishing Company.

#### Priority Areas for Proposals

Grant applications should address one or more of the following general priority areas:

- 1. Distance Education in Iowa
- 2. The Iowa Communications Network
- 3. Diffusion of Innovations Theory
- 4. The Iowa Distance Education Alliance, Iowa's Star Schools Project
- 5. Studies that build on previous IDEA/TEA Star Schools funded research



#### II. ELIGIBILITY CONSIDERATIONS

#### A. <u>Eligibility</u>

Grant proposals from both institutions and individuals (who are associated with an institution/organization) will be accepted, but all must be from Iowa applicants or have at least one in-state applicant. Graduate students are especially encouraged to apply.

When the proposed research study would be strengthened through joint efforts with other eligible applicants, such collaboration is favored. Collaboration with others in whose interests research is undertaken ensures a fuller perspective and eliminates the gap between researcher and "researched".

Any eligible institution or individual may submit more than one proposal.

#### B. <u>Availability and Use of Funds</u>

The range of grant awards for 1995-96 will be up to \$500.

One half of the approved grant funding will be provided at the beginning of the grant period. One half will be available after satisfactory completion of the research study.

Grants will be made for the period (February 1 - September 30).

A one page interim report will be required, and a final report will be due 30 days after completion of the study. Reports in journal article form are encouraged. All final reports will be published in an Encyclopedia of the Research: Distance Education in Iowa, 2nd Edition.

#### III. PREPARATION OF PROPOSALS

#### Proposal Format

For proposals to be considered, they should contain the following elements, in the order indicated:

Cover Page
Research Proposal Summary
Narrative
Summary of Budget Estimates
Budget Explanation
Appendices (one-page vita of key personnel and other significant appendices)

#### Cover Page

The cover page should include the project's title, the investigator's name, address, and phone number, and the investigator's institution.

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#### Research Proposal Summary

The summary is to be a clear and simple description of the proposed research study. State the objectives of the proposed research study and its basic elements. Provide as much detail as possible within the space limitations. The summary should be one page, or less.

Prepare the research proposal summary for publication purposes. It should highlight the importance of the study and be able to stand alone.

#### Narrative

The narrative should not exceed eight (8) pages double-spaced. The narrative should include:

#### 1. Significance and Need

Conduct a short review of relevant literature and relate it to your research questions. Provide a clear statement and description of the need for research in the topic area to be addressed. Build a case for the need for your research study.

#### 2. Study Description

Clearly describe the purpose of the proposed research; state measurable objectives for the study, making certain each objective relates to the study's purpose.

#### 3. Plan of Operation/Methodology

Describe the methods/procedures to be followed to achieve the objectives and state why they were selected. In your discussion, address:

- a. study design
- b. responsibilities of key personnel
- c. plan for monitoring and addressing progress

#### 4. Timetable of Activities

Identify the study's starting date, termination date, and other significant progress points. Use milestone charts and/or other graphics to outline activities throughout the research study period, if appropriate. If possible the study should be completed by September 30, 1996.

#### 5. <u>Expected Outcomes</u>

Describe the anticipated outcomes related to the proposed research objectives.

#### 6. <u>Applicability of Research Results</u>

Discuss why results or products of the proposed work can be expected to lead to better practices of distance education in Iowa and/or identify the need for and guide further research.



#### 7. Evidence of Collaboration

If applicable, describe collaborative efforts (who, what, how) to be carried out.

#### 8. Personnel Qualifications

Briefly describe the education and experience of the researcher and other key personnel and relate these qualifications to the proposed study activities.

Include vitae of key personnel in an appendix. Each vita should be one page in length (maximum) and should indicate the individual's qualifications for the proposed research study.

#### **Budget Matters**

A Budget Summary is required.

In a separate "Budget Explanation" section, identify and justify components of each major item in the budget. The explanation should briefly state why an item is important and how the prospective cost was estimated.

Requests for funding should relate to future expenditures.

Proposals showing in-kind contributions and/or matching funds are encouraged. In-kind contributions are property or services that support the research study but do not represent a "real dollar" expenditure. Matching funds are funds provided by the applicant which are equal to or a portion of the costs requested. An applicant's matching contribution may be in the form of dollar expenditures or in-kind services/resources.

#### **Appendices**

One appendix is required: That which includes the vitae of key personnel. (Each vita should be a maximum of one page in length.) In addition, appendices may be used sparingly to provide background or supporting information. It should be kept in mind, however, that reviewer's time is limited, so voluminous appendices may not be studied carefully.

#### IV. SUBMISSION OF PROPOSALS

- 1. Two copies of the complete proposal are required.
- 2. Copy must be double spaced on one side only of 8 1/2 X 11 white paper.
- 3. Pages are to be numbered.
- 4. Proposal copies are to be assembled in the order previously described and stapled but not otherwise bound.
- 5. The cover page is the only letter of transmittal needed or desired. Institutional letters of endorsement (e.g., from major professors) or transmittal, supporting letters, etc., should be placed in appendices.



6. For round one, proposals must be mailed by February 1, 1996, or hand delivered by 5:00 p.m. on February 1, 1996 to:

The Teacher Education Alliance Research Institute for Studies in Education (RISE) E005 Lagomarcino Hall College of Education Iowa State University Ames, IA 50011

7. Questions may be directed to RISE at (515) 294-7009.

#### **Timetable**

Application packets made available	10/15/95
Completed applications (2 copies) due	2/1/96
Announcement of awards	2/15/96
Funds made available to grantee	3/1/96

#### V. PROPOSAL EVALUATION

#### Review Process

A review panel will evaluate applications. The panel will select for award those proposals which, in its judgment, offer the greatest potential for improving education in Iowa classrooms. In some cases, negotiation with the applicant will be conducted.

#### **Evaluation Criteria**

Three general criteria will guide the review panel; they are the proposal's <u>significance</u>, its <u>feasibility</u>, and its <u>appropriateness for funding support</u>.

Reviewers will examine proposals and submit comments based on the specific criteria included with this document.

#### VIII. OTHER CONSIDERATIONS

#### **Human Subjects**

The protection of the rights and welfare of human subjects involved in research and related activities is the responsibility of the grantee.

#### Notification of Final Action

Notification of awards is made in writing. Individuals whose proposals were not selected will be advised as promptly as possible.

#### VI. RESEARCH STUDY AND AWARD MANAGEMENT

#### Grant Administration

Grants will be administered in accordance with the terms and conditions of this document.

A grant is normally made to an organization or individual, known as the grantee. Notification of an award is made by letter. The grant establishes a relationship in which:



- A. The TEA of the IDEA agrees to provide financial support for the research study to be performed under the provisions of the grant guidelines and contractual agreement.
- B. The grantee agrees to perform the research study, to manage prudently the funds provided by the grant, and to adhere to the provisions of the grant guidelines and contractual agreement.

The grantee is free to accept or to reject the grant. Normally, the proposal to obtain funds constitutes acceptance of a grant once it is made.

All written inquiries of a programmatic or technical nature should be directed to the TEA RISE, E005 Lagomarcino Hall, Iowa State University, Ames, Iowa, 50011. Telephone calls may be directed to (515) 294-7009.

The grant period extends from the effective date of the award through the expiration date. It is that span of time during which the objectives of the study are to be achieved and the grant funds are available for appropriate obligation. This period may be longer than the duration of the study in order to allow time for preparation of reports after the study is concluded. All commitments of grant funds should be made during the grant period.

#### **No-Cost Extensions**

It is expected that research studies will be completed within the time period specified in the award instrument. When the work is delayed, a no-cost extension may be requested. This request, along with a justification, should be received at least 45 days before the award expiration date.

#### Changes in Research Study Operation

Although major changes in the conduct of the study may be proposed at any time, changes in the scope, objectives, budget, and/or professional personnel of the study should be approved in advance.

If the proposed research study is not completed, the grantee will provide an accounting of funds spent and return unexpended funds.

#### Research Study Reporting Requirements

<u>Interim Report</u>. A one page interim report should be submitted no later than three months after funding is provided.

<u>Final Research Study Report</u>. Two copies of the Final Research Study Report are to be submitted within 30 days after expiration of the award. Extensions may be granted if requested.

The purpose of a Final Report is to provide a factual account of the research study for the record. It will be published in an <u>Encyclopedia of the Research: Distance Education in Iowa, 2nd Edition.</u>



# Affirmative Action, Equal Opportunity, and Civil Rights Policy Statement

The TEA - RISE is committed to the principles and concepts of affirmative action, equal opportunity and civil rights. In awarding research grants, the TEA - RISE will not discriminate on the basis of race, color, religion, national origin, gender, age, or handicap.

By submitting a proposal, prospective grantees certify they will carry out proposed grant functions in an environment free of discrimination.



# Teacher Education Alliance (TEA) Funded Research Projects: A Summary of Research Topics May, 1996

The Teacher Education Alliance awarded funding for ten research proposals on the topic of distance education in Iowa that will be completed during the 1995-1996 academic year. The following document lists the project titles and names of the investigators and summarizes the goals of each research project.

Abel, Omalley and Meredith Hays Curriculum and Instruction Iowa State University Ames, IA 50011 (515) 294-1941

Organizational Innovativeness in Phase III High Schools

The researchers will investigate the relationship between high school principal characteristics, including innovativeness, and their high school's use of the ICN. Surveys will be sent to principals of high schools with ICN connections as of April 1996. The survey will incorporate the Innovativeness Scale (IS) and questions about specific principal characteristics. Usage will be determined by monitoring each school's use of the ICN for one month. Analysis will be conducted to determine if principal characteristics and level of innovativeness affect use of the ICN in their school.

Adamson, Jane Mason 842 25th Street West Des Moines, IA 50265 (515) 224-1563

Effects of Gender on Peer Interaction and Attitude in Cooperative Groups During Use of Interactive Television

The researcher proposes to investigate the effect of gender on peer interactions within small cooperative learning groups working with an interactive television program (Loess Hills Interactive) delivered over the Iowa Communications Network (ICN). Two Iowa schools will participate in the study. Subjects will be 7th and 8th grade science students randomly assigned to one of five groups (all male, 3 male-1 female, 2 male-2 female, 1 male-3 female, all female). Students in groups of four will be videotaped for 30 minutes while working with the interactive program. The tapes will be analyzed using the Peer Interaction Coding System to categorize interactions among students. Students will also be given a survey to assess their attitudes toward both the group experience and toward the technology. Comparisons will be made to determine whether interaction patterns and satisfaction levels are significantly different for males and females.



6/6/96

Bigilaki, Lemonia Nitsa and Margaret Torrie and Cheryl Hausafus Family and Consumer Sciences Education and Studies 219 MacKay Hall Iowa State University Ames, IA 50011 (515) 294-1172

Knowledge, Ability, Interest, Beliefs, and Teaching Preferences of Family and Consumer Sciences Secondary School Teachers Toward the Use of the Interactive Distance Education Technology when Engaging Curriculum Competencies

The researchers will survey 250 family and consumer sciences secondary school teachers randomly selected from a list of 445 to determine their knowledge about and ability to use interactive distance education technology, their interest in using interactive distance education, and their beliefs about interactive distance education and its use in delivering specific curricular content.

Herring, Mary
Health and Human Performance
239 PEB
Iowa State University
Ames, IA 50011
(515) 294-8042

Identification of the Knowledge Base for the Creation of Constructivist Based Interactive K-12 Distance Learning Environments

The goal of the researcher is to identify and organize the components necessary to prepare teachers to create, facilitate, and evaluate a constructivist-based interactive distance learning environment at the K-12 level. A panel of ten to twenty specialists in the areas of constructivism and instructional technology will be used to (1) identify a set of principles for guiding the design of constructivist-based learning environments, (2) suggest distance learning designs to meet these principles, (3) determine what is required of teachers in each design, and (4) identify necessary teacher preparation to implement each design. The project will use Delphi consensus building techniques that incorporate questionnaires placed on World Wide Web homepages and follow-up electronic mail reminders.

Sereg, Patricia Ann Johnston Community Schools 6600 NW 62nd Johnston, IA 50131 (515) 278-0470

Internet Use in Iowa Schools as a Form of Distance Education: Concerns and Indicators of Success

The researcher will use a case study approach to investigate the levels of concern and attitudes of teachers in a single Iowa school district as the district progresses through the restructuring of local area networking and wide area networking and participates in specific interventions to enhance the process of implementing internet in the district. A questionnaire based on the Concerns Based Adoption Model (CBAM) will provide baseline data prior to staff development. The questionnaire will assess levels of concern, attitudes toward use of internet, and current level of internet use. Observations and interviews will be conducted by the researcher during staff development activities. Bi-weekly logs will be kept by five participants for a period of six months. The CBAM questionnaire will be re-administered after six months to determine changes in stages of concern, attitudes, and use of the internet.



Shinn, Yun Ho and Greg Miller
Department of Agricultural Education and Studies
220 Curtiss Hall
Iowa State University
Ames, IA
(515) 29400901

Cognitive Levels of Instruction in Agricultural Distance Learning Courses at Iowa State University

Professors who taught agricultural courses in the College of Agriculture at Iowa State University live or via distance education technologies (videotape or ICN) during the 1994 and 1995 calendar years will be selected to participate in a study to assess cognitive levels of instruction using Bloom's Taxonomy of educational objectives. Courses in a variety of content areas (agronomy, agricultural economics, agricultural education, animal science, agricultural systems technology, and plant pathology) will be included. Two instruments will be used. One instrument (the Florida Taxonomy of Cognitive Behavior) will be used to determine assessed cognitive levels in the three types of courses (live, videotape, or ICN) while the other instrument, based on the Newcomb-Trefz model, will be used to identify acceptable cognitive levels of instruction. Comparisons will be made between acceptable and assessed cognitive levels. Assessed cognitive levels will also be compared across delivery methods.

Simonson, Donald Department of Music Music Hall 202 Iowa State University Ames, IA 50011 (515) 294-3653

An Evaluation of the Effectiveness of the ICN as a Delivery System for Real-time Solo and Small Ensemble Vocal Music Masterclasses

The researcher will survey high school music students and vocal music directors participating in vocal music masterclasses either live on-site or via the Iowa Communications Network (ICN). First, an interest survey will be mailed to a random sample of secondary public school vocal music directors to assess current expectations and attitudes concerning the efficacy of distance learning in general, level of interest in participating in a distance learning experience, and access to an operable ICN site. Solo and small group masterclasses will then be presented on-site at an area high school and over the ICN. After completion of the masterclasses, as post-experience survey will be given to participating vocal music directors and their students.

Swarts, Pam Iowa Valley Community College Marshalltown, IA (515) 752-4645

Moving Mountains: Resolving Barriers to Effective Distance Education via the Iowa Communications Network

The goal of the researcher is to identify barriers that impede effective use of the ICN and determine strategies that can provide successful resolution to those barriers. Five focus groups involving members of Regional Telecommunications Councils (RTC) and ICN schedulers will be held over the ICN in order to identify barriers that have statewide impact on use of the ICN. Barriers will be prioritized and strategies for resolution identified though use of Delphi surveys sent to approximately 150 RTC members and regional schedulers.



6/6/96

Taylor, Debra R., Margaret Torrie and Cheryl Hausafus Family and Consumer Sciences Education and Studies 310 MacKay Hall Iowa State University Ames, IA 50011 (515) 294-2925

Family and Consumer Sciences Educators' Readiness for Adult Educational Delivery via the Iowa Communications Network

The researchers will mail a survey to 168 extension staff members selected from a stratified random sample to determine whether educational background and experience in a professional organization influences educators' readiness to utilize the Iowa Communications Network (ICN) as an instructional tool. Those surveyed will include extension service professionals, paraprofessionals, and county directors. The researcher developed survey will include items to assess (1) knowledge and experience in distance education and use of the ICN, (2) attitude toward the implementation of the ICN as an instructional tool, (3) demographic characteristics, and (4) past experience and future projections regarding use of the ICN as an instructional tool to deliver Family and Consumer Sciences content. Analyses will be conducted to determine (a) whether knowledge and prior experience with technology contribute to the decision to use the ICN as an instructional tool, (b) whether favorable attitudes toward the ICN exist among extension professionals and paraprofessionals, (c) to what extent the ICN is being used by adult educators, and (d) how variables related to expertise and educational background influence decisions to use the ICN as an instructional tool.

Westbrook, Thomas S.
Drake University School of Education
Des Moines, IA 50311
(515) 271-3078

A Longitudinal Profile of the Content Learning and the Attitudes of Adults Enrolled in a Graduate Degree Program Utilizing the Iowa Communications Network

The researcher will investigate the content learning and attitudinal changes of students enrolled in a two-year graduate business degree program offered over the Iowa Communications Network (ICN). The goal is to assess the extent to which the ICN serves as an effective medium to deliver a graduate degree program. The two-year study started in 1994 and will be completed in the summer of 1996. Data to be collected include admission profiles of the students, term grade point averages, and student responses to surveys administered at four points during the degree program. The survey was designed by the researcher to compare students' anticipated and actual (1) interaction levels, (2) satisfaction with the class, and (3) extent the ICN technology interfered with the overall success of the class. The sample consists of 54 students enrolled in MBA classes including 23 on-campus students and 31 remote site students taking classes at three remote locations. In addition to comparing the responses of the remote site students over time, comparisons will be made between the on-campus and remote site students.



#### **Evaluation Request**

After reviewing the Encyclopedia of Distance Education Research in Iowa, please take a minute to share your opinion with us. We appreciate your comments.

1.	,	<b></b>				
	College FacultyCollege Administrator	K-12 K-12	Teacher			Media Specialist
		Other -Pleas				Corporate Trainer
2.	How did you receive this resource?RequestedFrom colleague	Rece Othe	ived at C	Conference/v	worksho	P.
3.	How would you rate the overall appearance of this resource?	1 very poor	2 poor	3 mediocre	4 good	5 very good
4.	How would you rate the content of this resource?	1 very poor	2 poor	3 mediocre	4 good	5 very good
5.	How would you rate the usefulness of this resource?	1 very poor	2 poor	3 mediocre	4 good	5 very good
6.	What is your overall rating of of this resource?	1 very poor	2 poor	3 mediocre	4 good	5 very good
7.	How would you rate your knowledge of distance education?	1 none	2 very little	3 some	4 quite a bit	5 extensive
8.	How would you rate your involvement in distance education?	nt 1 none	2 very little	3 some	4 quite a bit	5 extensive
9	Please identify some of the features of	of this resour	ce that v	ou like best		

- 10. Please share any suggestions you have for improving this resource.

Additional Comments

Write: Research Institute for Studies in Education

E006 Lagomarcino

Iowa State University

Ames, IA 50011

Phone: Nancy Maushak

515/294-1941

nmaushak@iastate.edu

Fold, tape, and mail.



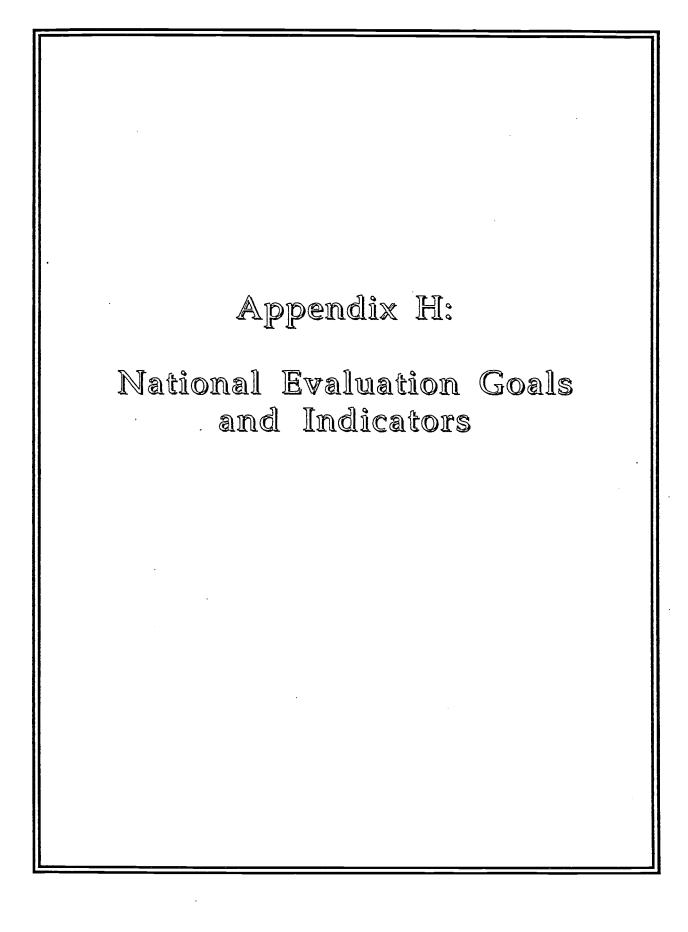
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Research Institute for Studies in Education Star Schools Evaluation E006 Lagomarcino Iowa State University Ames, IA 50011

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# National Evaluation 3/26/96

OBJECTIVE	OUTCOMES	INDICATORS
Objective 1: Increase access to educational programs by establishing a technological infrastructure for distance learning.	<ul><li>A. Learners have access to interactive video systems providing educational programming. (1996)</li></ul>	1. Number of interactive video sites established.
		2. Number of lines installed/bandwidth available.
	B. Learners have access to internet/on-line services. (1996)	3. Number of sites with internet access as a result of the project.
		4. Description of types of data connections provided by the project.
	C. Existing/other systems integrated into infrastructure. (1996)	5. Equipment/facilities/lines from existing systems connected to infrastructure
Objective 2: Reach underserved learners throughout the US and its affiliated territories.	D. The scope of the program includes different types of learning communities. (1996)	6. Characteristics of K-12 schools and other D. The scope of the program includes different educational sites connected (video and/or data connecting communities. (1996)
,		7. Number and percentage of connected K-12 districts classified as Title 1.
	E. Learners of all ages have opportunities to participate in educational activities. (1996)	8. Number of hours K-12 and other site classrooms are in use.
		9. Number and type of students participating in educational activities offered.

OBJECTIVE	OUTCOMES	INDICATORS
Objective 3: Expand instruction in core subject areas as well as literacy skills and vocational education.	F. A variety of educational opportunities are available which had not been available. (1996)	<ol> <li>Number and type of educational activities available by subject area, audience, and educational level.</li> </ol>
		11. Number of participants in educational activities by subject area.
	G. Instructional methods which foster integration of technology into the curriculum are promoted. (1996)	12. Number, characteristics, and description of technology training provided by the project.
		13. Participants report that training was effective.
	H. Improvement in student skills and technology awareness attributed to the Star Schools program. (1996+)	<ol> <li>Teachers report improved student skills and technology awareness as a result of Star Schools activities.</li> </ol>
		15. Students report that the activities/products added to the quality of the instruction they received.
		16. Students report satisfaction with Star Schools activities/products.

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OBJECTIVE OUTCOMES  17. Number and type of staff development activities participate in staff development activities. (1996)  18. Number and type of staff development activities (1996)  19. Participants in staff development activities (1996)  19. Participants rate staff development activities (1996)  10. Progress is reported in integrating distant activities. (1996+)  11. Educational practices have changed as a result of delivery as satisfactory.  12. Educational institutions continue to value (1996)  13. Educational institutions continue to value (1996)  14. Educational institutions continue to value (1996)  15. Educational institutions continue to value (1996)  16. Decreased technology planning in K-12 and use technology provided by Star Schools extivities.  1996+)  18. Number and type of staff development activities and method of delivery as satisfactory.  20. Progress is reported in integrating distant integrating in Staff and use technology provided by Star Schools extivities.  21. Educational institutions continue to value (1996)  22. Increased technology planning in K-12 and use technology provided by Star Schools extivities.  23. Demand for connections continues.			
staff development activities. (1996)  staff development activities. (1996)  J. Educational practices have changed as a result of educators participating in Star Schools activities. (1996+)  K. Educational institutions continue to value and use technology provided by Star Schools. (1996+)	OBJECTIVE	OUTCOMES	INDICATORS
J. Educational practices have changed as a result of educators participating in Star Schools activities. (1996+)  K. Educational institutions continue to value and use technology provided by Star Schools. (1996+)	elopment I.	rticipate in	17. Number and type of staff development activities provided via distance education technologies and other means.
J. Educational practices have changed as a result of educators participating in Star Schools activities. (1996+)  K. Educational institutions continue to value and use technology provided by Star Schools. (1996+)			18. Number of participants in staff development opportunities.
J. Educational practices have changed as a result of educators participating in Star Schools activities. (1996+)  K. Educational institutions continue to value and use technology provided by Star Schools. (1996+)			, 19. Participants rate staff development activities and method of delivery as satisfactory.
K. Educational institutions continue to value and use technology provided by Star Schools. (1996+)	J. Ed resul activi	ucational practices have changed as a t of educators participating in Star Schools ities. (1996+)	20. Progress is reported in integrating distance education into the educational institutions of the state.
K. Educational institutions continue to value and use technology provided by Star Schools. (1996+)			21. Educators report improvements/changes in practice as a result of participating in Star Schools activities.
	K. E. and t. (1996)	ducational institutions continue to value use technology provided by Star Schools. 5+)	22. Increased technology planning in K-12 schools and other educational institutions is evident.
			23. Demand for connections continues.
24. Use of the equation period continues			24. Use of the equipment beyond the funding period continues.

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OBJECTIVE  L. The projections us institutions us technologies.		
L. ins	OUTCOMES	INDICATORS
Ę.	L. The project and participaling educational institutions use a variety of electronic technologies and tools in providing and participating in distance education. (1996)	25. Number and types of distance education technologies made available by the project.
		26. Number of educational institutions acquiring technology through Star Schools sources within the last ten years.
		27. Educational institutions report that distance education equipment/products they received is available adequate, working properly, and used.
M. Partnersh Objective 6: Foster partnerships.	M. Partnerships include a variety of entities. (1996)	28. Number, type, and role of entities in the telecommunications partnerships.
	N. Partnerships foster collaboration. (1996)	29. Participants in the partnership report increased collaboration as a result of the Star Schools project.
Objective 7: Demonstrate improved cost  Observation	O. Determine value of the project. (1996+)	30. Determine fixed and variable costs and ratio between the two.
		31. Determine the value of increased access to expanded educational opportunities.
* suggested source - each state may be different		



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